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RESEARCH MEMORANDUM

AERODYNAMIC CHARACTERISTICS INCLUDING PRESSURE
DISTRIBUTIONS OF A FUSELAGE AND THREE
COMBINATIONS OF THE FUSELAGE
WITH SWEPT-BACK WINGS AT
HIGH SUBSONIC SPEEDS

By Fred B. Sutton and Andrew Martin

Ames Aeronautical Laboratory
Moffett Field, Calif.

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NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS

RESEARCH MEMORANDUMAERODYNAMIC CHARACTERISTICS INCLUDING PRESSURE DISTRIBUTIONS
OF A FUSELAGE AND THREE COMBINATIONS OF THE FUSELAGE WITH
SWEPT-BACK WINGS AT HIGH SUBSONIC SPEEDS

By Fred B. Sutton and Andrew Martin

SUMMARY

As part of an NACA transonic research program, a series of wing-fuselage combinations varying chiefly in wing plan form is being investigated. In the part of the investigation reported herein, three representative model wings of the series were tested at Mach numbers up to 0.94 in the Ames 16-foot high-speed wind tunnel. All these model wings had NACA 65A006 sections parallel to the plane of symmetry.

Force and pitching-moment data and tabulated pressure measurements are presented for the wing-fuselage combinations and for the fuselage alone. Downwash angles and dynamic-pressure characteristics measured at probable horizontal-tail locations are shown. Also presented are tuft studies of the wing-fuselage combinations, approximate effects of wing elasticity on lift and pitching moment, and a comparison of data from this investigation with theory and with results from investigations in the Langley high-speed 7- by 10-foot wind tunnel utilizing the transonic-bump technique.

Results show that lift-curve slopes for all the wings investigated increased with Mach number. Compressibility effects on drag were generally small. More abrupt changes in stability occurred at lower lift coefficients for the wing with 45° of sweepback and an aspect ratio of 6 than for the other wing-fuselage combinations. Slight increases in static longitudinal stability were observed at the higher Mach numbers for all the wings investigated.

A comparison of data from this investigation with that from investigations of similar models on the transonic bump in the Langley high-speed 7- by 10-foot wind tunnel generally shows poor correlation quantitatively; agreement qualitatively is fair. Possible reasons for this lack of agreement are suggested.

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Results of this investigation indicate large effects of aeroelastic deformation on the lift-curve slopes and on the longitudinal stability of the models. The wing with 45° of sweepback and an aspect ratio of 6 indicated a maximum decrease in lift-curve slope of approximately 30 percent and a forward shift in neutral point of approximately 10 percent. Smaller aeroelastic effects were observed for the other wing-fuselage combinations.

INTRODUCTION

A coordinated transonic research program has been established by a special NACA transonic subcommittee. An objective of this program is to investigate the relative importance of various wing-plan-form variables and to provide experimental data for a wide range of wing plan forms, particularly at transonic speeds. An extensive investigation of these variables has been made in the Langley high-speed 7- by 10-foot wind tunnel utilizing the transonic bump, which provides a method of testing models at Mach numbers near unity.

In order to obtain data at higher Reynolds numbers than were attainable in the Langley high-speed 7- by 10-foot wind-tunnel investigations, three representative model wings of the series tested in that wind tunnel were tested in the Ames 16-foot high-speed wind tunnel at Mach numbers up to 0.94 and Reynolds numbers which varied between 2.6 and 5.1 million. The wings were tested in combination with a fuselage similar to the one used in the 7- by 10-foot wind-tunnel investigations. The results are reported herein and are compared with results for three similar model wings tested on the transonic bump (references 1, 2, and 3).

NOTATION

The coefficients and symbols used in this report are defined as follows:

$$C_D \text{ drag coefficient } \left(\frac{\text{drag}}{q_0 S} \right)$$

$$C_L \text{ lift coefficient } \left(\frac{\text{lift}}{q_0 S} \right)$$

$$C_m \text{ pitching moment about the quarter chord of the wing mean aerodynamic chord } \left(\frac{\text{pitching moment}}{q_0 S c} \right)$$

- A aspect ratio $\left(\frac{b^2}{S}\right)$
- M Mach number
- P pressure coefficient $\left(\frac{p - p_0}{q_0}\right)$
- S wing area, square feet
- V velocity, feet per second
- a.c. aerodynamic center
- b wing span, feet
- c wing chord parallel to the free stream, feet
- \bar{c} wing mean aerodynamic chord $\left(\frac{\int_0^{b/2} c dy}{\int_0^{b/2} dy}\right)$, feet
- p static pressure, pounds per square foot
- q dynamic pressure $\left(\frac{1}{2} \rho V^2\right)$, pounds per square foot
- y lateral distance from the model plane of symmetry, feet
- α angle of attack of wing-root chord line, degrees
- ϵ downwash angle relative to the free stream, degrees
- θ angle of twist of wing chord relative to the wing-root chord, positive with trailing edge up, degrees
- θ_t' angle of twist at the wing tip for an equivalent linear spanwise distribution of twist, degrees
- Λ angle of sweepback of the wing quarter-chord line, degrees
- λ taper ratio (c_t/c_r)
- ρ mass density of air, slugs per cubic foot

Subscripts

- o free-stream conditions

- r wing root
- t wing tip
- u uncorrected for tunnel-wall effects

MODEL AND APPARATUS

One of the model wing-fuselage combinations mounted in the Ames 16-foot high-speed wind tunnel is shown in figure 1. Dimensions and details of the various models tested are given in figures 2 and 3.

The fuselage was a body of revolution with a fineness ratio of 12 modified to accommodate a sting-type model support by removing the rear one-sixth of the body and increasing the diameter slightly at the rear end. The increased diameter was faired forward with straight-line elements to the points of tangency with the basic shape (fig. 2(a)). These changes resulted in a fuselage fineness ratio of 10. The model fuselage was constructed of steel and aluminum sections machined to shape. Ninety pressure orifices were placed along the right side of the fuselage at fifteen transverse sections as shown in figure 2(b).

The wings were constructed with a thin layer of a tin-bismuth alloy over steel spars and were approximately 30 percent as rigid as solid steel wings of the same dimensions. One hundred pressure orifices were installed in the right half of each wing at five sections parallel to the air stream (fig. 3(b)).

A sting-type model-support system was used with a wire-resistance strain-gage balance enclosed in the fuselage to measure lift, drag, and pitching moment. Tubes from the pressure orifices in the models were led through the model-support system to multiple manometers where the pressure data were recorded photographically. The angle of attack was indicated by means of a pendulum-operated selsyn transmitter, also enclosed in the fuselage. Wing-tip angles were measured visually with a protractor attached to one of the wind-tunnel windows.

A survey rake used to measure downwash angles and dynamic pressures was clamped to the support sting just behind the fuselage. The rake was equipped with 10 calibrated pitch heads for determining downwash angles. Static-pressure orifices on each pitch head and 20 total-pressure tubes were provided for the dynamic-pressure survey. Figures 1 and 2(a) show the survey rake in place behind the model and figure 4 presents dimensions and details of the rake.

TESTS

Test Conditions

Force and pressure measurements were made on the fuselage alone and on the three wing-fuselage combinations. Angles of attack of the wing tips were measured to determine the degree of twist of the wings under the aerodynamic loads. Downwash angles and dynamic pressures were measured at probable horizontal-tail locations. Tuft studies were made of the flow over the wing-fuselage combinations.

The tests covered a Mach number range from 0.40 to 0.94. The Reynolds number varied from approximately 3.2 million to 5.1 million based on the mean aerodynamic chord of the wing with an aspect ratio of 4. The Reynolds number for the wings with an aspect ratio of 6 varied from approximately 2.6 million to 4.2 million. The angle-of-attack range was from -4° to the highest positive angles attainable within the structural limits of the model wings.

Test Mach numbers were maintained within ± 0.5 percent of the indicated values. It is estimated that angle-of-attack measurements were accurate to $\pm 0.1^\circ$ and wing-tip angles were read to $\pm 0.2^\circ$. Downwash angles are estimated to be accurate to within $\pm 0.2^\circ$ of the values shown.

Corrections

Induced tunnel-wall effects.— Corrections for the effects of the tunnel walls on the induced flow angles were computed by the method of reference 4. The corrections added to the angle of attack and to the drag coefficient were as follows:

$$\Delta\alpha = 0.302 C_L$$

$$\Delta C_D = 0.00526 C_L^2$$

No corrections have been made to the downwash data for induced tunnel-wall effects, but it is estimated that the magnitude of such corrections would be approximately one and one-half times the correction shown for angle of attack. No corrections have been applied to the pressure data for induced tunnel-wall effects.

Constriction.— Constriction effects were calculated by the method of reference 5. The magnitude of the corrections is shown below:

Corrected Mach number	Uncorrected Mach number
0.400	0.400
.600	.600
.700	.698
.750	.747
.800	.797
.820	.816
.840	.833
.860	.852
.880	.871
.900	.888
.920	.907
.940	.922

No account was taken of the sweepback angle of the wings in computing either the induced wind-tunnel-wall effects or the constriction corrections.

Sting interference.— In order to correct partially the drag data for sting interference, static pressures were measured at the base of the model fuselage. The difference between these measured base pressures and the free-stream static pressure was used in conjunction with the fuselage cross-sectional area at the base of the model to calculate increments that would correct the drag coefficients approximately to what they would be with free-stream static pressure at the base of the model. The following increments, calculated in this manner, were added to the measured drag coefficients:

Corrected Mach number	ΔC_D
0.400	0.0007
.600	.0011
.700	.0011
.750	.0011
.800	.0011
.820	.0011
.840	.0012
.860	.0012
.880	.0013
.900	.0016
.920	.0017
.940	.0020

The corrections were unaffected by variation of angle of attack. The effect of the wind-tunnel longitudinal pressure gradient on drag was negligible.

Aeroelasticity.— The model wings investigated deformed elastically under the aerodynamic loads to which they were subjected. These deformations, for the most part, appeared as wing bending which, for the swept wings, caused a relative rotation of the streamwise chords, resulting in an effective twist along the spans of the wings. In the interest of making the results of the present investigation more convenient for the design of wings of different stiffnesses and hence subject to different aeroelastic effects, it would be desirable to correct the present results for aeroelasticity and to thereby reduce them to rigid-wing characteristics that could be adjusted then for the aeroelastic effects of actual wings of any stiffness; or alternatively, to describe the elastic deformation of the test wings so that their deformed shapes could be used as the starting point from which to adjust for the aeroelastic effects of any actual wing. Unfortunately, it has been impossible to do either with any degree of exactness. However, an approximation of the aeroelastic twist of the test wings and their effects on the slopes of the lift curves and the pitching-moment curves for the model wings used in this investigation are shown in figures 5 and 6.

The spanwise variations of twist shown by the solid lines in figure 5(a) were calculated on the basis of the elastic properties of the model wing structures, assuming linear spanwise distribution of lift. Figure 5(a) also shows an assumed linear twist distribution for the wings tested. It was found by the method of reference 6 (Weissinger) that the linear twist distribution shown is approximately equivalent to the calculated twist distributions in its effect on the aerodynamic characteristics of the wings. This linear distribution was used in conjunction with the measured wing-tip deflection angles, the measured lift on the wings, and the free-stream dynamic pressure to calculate the equivalent wing-tip twist per unit lift coefficient shown in figure 5(b) for various Mach numbers. It is to be noted that the resulting values of equivalent wing-tip twist shown in figure 5(b) are approximately 20 percent larger than the measured values.

To obtain a measure of the effect of the elasticity of the model wings on the lift and moment characteristics, the computed characteristics of rigid wings are compared with the observed characteristics of the elastic models. The starting point was the elastic wing at a lift coefficient of 0.2 for which (1) the angle of attack and pitching-moment coefficients were known from the present experimental investigation, and (2) the magnitude of the equivalent tip twist was determined from figure 5(b). Next, for a rigid wing having this twist, the angle of attack and the pitching-moment coefficient for zero lift were calculated by means of the charts of reference 6. The lift-curve and the

pitching-moment-curve slopes for the rigid wing were then computed from the following relations:

$$\left(\frac{dC_L}{d\alpha} \right)_{\text{rigid}} = \frac{0.2}{\alpha_{0.2} - \alpha_0}$$

$$\left(\frac{dC_m}{dC_L} \right)_{\text{rigid}} = \frac{C_{m0.2} - C_{m0}}{0.2}$$

where the subscripts refer to the lift coefficients at which the values were taken. These rigid-wing values were then compared with the measured elastic-wing values for zero lift. The comparisons are shown in figure 6 as the ratios of rigid-wing to elastic-wing lift-curve slopes, and as the difference between rigid-wing and elastic-wing pitching-moment-curve slopes.

The results in figure 6 include such viscous effects as appeared in the elastic-wing data over the lift interval used in the computation of the rigid-wing characteristics (lift coefficient 0 to 0.2). The results of figure 6 are believed to be applicable at moderately higher lift coefficients as long as the wing lift and pitching-moment characteristics remain approximately linear. However, these results will not apply when the wing characteristics depart from linearity since this is an indication of an appreciable change in viscous effects.

No corrections have been made to the drag data for the deformation of the model wings under the air loads.

Balance interaction.— No corrections were made for interaction of lift and pitching moment on the balance drag readings since the degree of interaction varied during the investigation. In general, this effect was small and caused the drag readings to be slightly high at the higher lift coefficients. Interaction between the other balance components was negligible. While the precision of the force and moment data is not indicated, the data presented herein, with the exception of a few points at high lift coefficients, are plotted within the accuracy of the strain-gage balance.

Tares.— Corrections were made throughout the angle-of-attack range to account for the static tares due to the weight of the model.

RESULTS AND DISCUSSION

Pressure Measurements

The pressures measured on the fuselage and on the three wing-fuselage combinations are presented in coefficient form in tables I to VII. Each table shows the pressure coefficients at various stations on the wings or the fuselage for various Mach numbers and angles of attack. The designations of the wing and fuselage stations used in the tables are shown in figures 2(b) and 3(b). Table I shows the pressure coefficients measured on the fuselage alone. Tables II, III, and IV show pressure coefficients on the fuselage when in combination with the three different wings. Tables V, VI, and VII show pressure coefficients on the three different wings in combination with the fuselage.

To expedite publication of these results, the pressure data have not been analyzed. However, typical plots of pressure coefficients measured at 75 percent of the semispan on the wing having 45° of sweepback and an aspect ratio of 4 are shown in figure 7 for several Mach numbers.

Basic Aerodynamic Characteristics

Lift, drag, and pitching-moment characteristics of the three swept-back wings in combination with the fuselage are presented in figures 8, 9, and 10 without correction for elastic distortion under aerodynamic load. The variation of lift coefficient with angle of attack is shown in figure 8. Due to structural limitations of the models, maximum lift was not reached for any of the models. The variation of pitching moment with lift is shown in figure 10. At low Mach numbers, the wing with 45° of sweepback and an aspect ratio of 6 became very unstable at a lift coefficient of approximately 0.45; whereas comparable changes in stability are delayed on the other wings to a lift coefficient of approximately 0.6. The force and moment data for the fuselage alone are presented in figure 11. The coefficients are based on the total wing area and on the mean aerodynamic chord of the wings having an aspect ratio of 6.

Lift-Curve Slopes

The variations of lift-curve slope with Mach number at a lift coefficient of 0.2 are shown in figure 12 for the three wing-fuselage combinations. Measured slopes, measured slopes corrected for aeroelastic

effects, the transonic-bump data from references 1, 2, and 3, and the theoretical variations of the lift-curve slopes with Mach number are shown. The theoretical variations of lift-curve slope with Mach number were calculated by the method of reference 7, using an application of the Prandtl-Glauert rule. These theoretical variations were then applied to the slopes which were measured at 0.40 Mach number and corrected for aeroelastic effects.

Lift-curve slopes generally increased with Mach number for all the plan forms tested; however, a reversal of this trend is indicated at the highest Mach number of the tests. The theoretical variation of lift-curve slope with Mach number was less than the measured variation corrected for elasticity.

The data from this investigation show some qualitative agreement with the transonic-bump data of references 1, 2, and 3, but agreement is poor quantitatively. It is believed the lack of agreement is due, at least in part, to the low Reynolds numbers of the bump tests and to the basic limitations of the bump method of testing (reference 7).

The effects of aeroelastic distortion on the lift-curve slopes were large. At the highest Mach number of the test, the model distortion caused a 30-percent reduction in lift-curve slope of the wing with 45° of sweepback and an aspect ratio of 6. Smaller effects were calculated for the other wings. These results serve to emphasize the importance of aeroelastic effects on the aerodynamic characteristics of thin swept-back wings, not only from the standpoint of obtaining reliable data from wind-tunnel tests, but also with regard to the performance of the airplane. For example, the structure of the model wing with 45° of sweepback, an aspect ratio of 6, and NACA 65A006 sections was such that its flexibility was about the same as the flexibility of a geometrically similar airplane wing designed for a wing loading of 60 pounds per square foot and a load factor of 5. The other two model wings were considerably less flexible in comparison with typical airplane construction. Since the dynamic pressure at the highest Mach number of the tests corresponded to a flight altitude of 15,000 feet, it is evident that aircraft flying at high subsonic speeds and moderate altitudes may be susceptible to large effects of aeroelastic deformations. All the performance parameters of the airplane which depend upon the spanwise distribution of lift will be affected, including the lift-curve slope, longitudinal stability, induced drag, downwash distribution, and wing bending moments.

Static-Longitudinal Stability

The variation of the stability parameter dC_m/dC_L with Mach number is shown for 0.2 lift coefficient in figure 13. Measured data, measured

data corrected for aeroelasticity, and data from the transonic-bump tests reported in references 1, 2, and 3 are presented. Aeroelastic effects were large, causing a maximum increase of pitching-moment-curve slope of 0.097 for the wing with 45° of sweepback and an aspect ratio of 6. This increase is equivalent to a forward shift of the neutral point of almost 10 percent of the mean aerodynamic chord. In general, static longitudinal stability corrected for aeroelasticity increased with Mach number for all the plan forms investigated. The wing with 45° of sweepback and an aspect ratio of 4 and the wing with 35° of sweepback and an aspect ratio of 6 indicated large stability increases at the higher Mach numbers. In general, stability results from this investigation are in poor agreement with those from the transonic-bump tests. The transonic-bump data indicate large decreases in stability beginning at 0.2 to 0.3 lift coefficients for the various plan forms; whereas the data presented in figure 10 show instability beginning at 0.4 to 0.6 lift coefficients. The probable reasons for these differences have been discussed in the section on lift-curve slope.

Drag

The variations of drag coefficient with Mach number at lift coefficients of 0, 0.2, and 0.4 are presented in figure 14 for the three wing-fuselage combinations. Data from this investigation are compared with transonic-bump data from references 1, 2, and 3. In general, Mach number effects on the drag coefficients over the speed range of this investigation were small; the drag-divergence Mach number was not reached for any of the wings. It is believed that the decreases in drag coefficient with increasing Mach number shown at the higher lift coefficient are partially due to aeroelastic deformation of the wings. Drag coefficients from this investigation are considerably lower than the values shown in references 1, 2, and 3. The drag data, presented herein, on the whole agree more closely with results from other investigations of similar and nearly similar wing-fuselage configurations than do the transonic-bump data (reference 7).

Downwash and Dynamic Pressure

Downwash angles and gradients are shown for the wing-fuselage combinations in figures 15 and 16. Downwash gradients were maximum near the extended plane of the wing chord and decreased with increase in distance above this plane. The gradients shown (fig. 16) were measured 12 inches from the plane of symmetry of the model. Measurements made 6 inches from the plane of symmetry of the model (fig. 15) show the effect of the fuselage on the wing wake.

The results of the dynamic-pressure surveys are shown in figure 17. They indicate that at the higher Mach numbers the dynamic pressures at the center of the wing wake were approximately 10 to 15 percent less than free-stream dynamic pressure. The vertical displacement of the wake center with increase in angle of attack is apparent.

Tuft Studies

Figures 18, 19, and 20 show tufts on the three wing-fuselage combinations. The pictures indicate the spanwise boundary-layer flow due to sweepback and the stall progression from the tip inward with increase in angle of attack. The leading-edge type of separation common to thin wings with small leading-edge radii is also indicated.

CONCLUSIONS

The results of this investigation indicate the following conclusions:

1. In general, lift-curve slopes for all the wings investigated increased with Mach number. Compressibility effects on drag coefficients were generally small. More abrupt changes in stability occurred at lower lift coefficients for the wing with 45° sweepback and an aspect ratio of 6 than for the other wing-fuselage combinations. Slight increases in static-longitudinal stability were observed at the higher Mach numbers for all the wings investigated.
2. A comparison of data from this investigation with those from investigations of similar models on the transonic bump in the Langley high-speed 7- by 10-foot wind tunnel showed generally poor correlation quantitatively; agreement qualitatively was fair. It is believed that the lack of agreement was due, at least in part, to the low Reynolds numbers of the bump tests and to inherent limitations of the bump method of testing.
3. Results of this investigation indicate large effects of aeroelastic deformation on the lift-curve slopes and on the longitudinal stability of the models. The wing with 45° of sweepback and an aspect ratio of 6 underwent a maximum decrease in lift-curve slope of approximately 30 percent and a forward shift of the neutral point of approximately 10 percent. Smaller aeroelastic effects were observed for the other wing-fuselage combinations.

Ames Aeronautical Laboratory,
National Advisory Committee for Aeronautics,
Moffett Field, Calif.

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TABLE I.—PRESSURE COEFFICIENTS ON THE FUSELAGE ALONE.

(a) M, 0.40.

Span- wise dimen- sion (in.)	Lateral dimension (in. chord radius)	Angle of attack, degrees											
		8		10		12		14		16		18	
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
10	8.7	-0.083	0.058	-0.083	0.114	-0.086	0.152	-0.083	0.199	-0.069	0.211	-0.042	0.223
	4.3	-0.083	0.076	-0.083	0.111	-0.086	0.168	-0.083	0.214	-0.078	0.211	-0.048	0.195
	70.7	-0.083	0.053	-0.083	0.086	-0.086	0.126	-0.083	0.168	-0.078	0.186	-0.048	0.186
15	8.7	-0.101	0.056	-0.101	0.104	-0.104	0.167	-0.101	0.209	-0.089	0.214	-0.066	0.206
	4.3	-0.101	0.065	-0.101	0.108	-0.104	0.169	-0.101	0.211	-0.081	0.211	-0.061	0.197
	70.7	-0.101	0.056	-0.101	0.079	-0.103	0.125	-0.101	0.169	-0.081	0.188	-0.059	0.186
20	8.7	-0.120	0.056	-0.120	0.104	-0.124	0.176	-0.120	0.221	-0.109	0.214	-0.089	0.206
	4.3	-0.120	0.065	-0.120	0.108	-0.124	0.179	-0.120	0.223	-0.109	0.218	-0.089	0.208
	70.7	-0.120	0.056	-0.120	0.079	-0.123	0.125	-0.120	0.171	-0.109	0.196	-0.089	0.193
25	8.7	-0.139	0.056	-0.139	0.104	-0.142	0.186	-0.139	0.231	-0.127	0.214	-0.109	0.206
	4.3	-0.139	0.065	-0.139	0.108	-0.142	0.189	-0.139	0.233	-0.127	0.218	-0.109	0.208
	70.7	-0.139	0.056	-0.139	0.079	-0.141	0.125	-0.139	0.171	-0.127	0.196	-0.109	0.193
30	8.7	-0.158	0.056	-0.158	0.104	-0.161	0.206	-0.158	0.276	-0.147	0.214	-0.129	0.206
	4.3	-0.158	0.065	-0.158	0.108	-0.161	0.209	-0.158	0.278	-0.147	0.218	-0.129	0.208
	70.7	-0.158	0.056	-0.158	0.079	-0.160	0.125	-0.158	0.225	-0.147	0.202	-0.129	0.206
35	8.7	-0.177	0.056	-0.177	0.104	-0.180	0.226	-0.177	0.306	-0.165	0.214	-0.142	0.206
	4.3	-0.177	0.065	-0.177	0.108	-0.180	0.229	-0.177	0.308	-0.165	0.218	-0.142	0.208
	70.7	-0.177	0.056	-0.177	0.079	-0.181	0.125	-0.177	0.254	-0.165	0.202	-0.142	0.206
40	8.7	-0.196	0.056	-0.196	0.104	-0.199	0.246	-0.196	0.336	-0.184	0.214	-0.162	0.206
	4.3	-0.196	0.065	-0.196	0.108	-0.199	0.249	-0.196	0.338	-0.184	0.218	-0.162	0.208
	70.7	-0.196	0.056	-0.196	0.079	-0.200	0.125	-0.196	0.284	-0.184	0.202	-0.162	0.206
45	8.7	-0.215	0.056	-0.215	0.104	-0.218	0.266	-0.215	0.366	-0.203	0.214	-0.182	0.206
	4.3	-0.215	0.065	-0.215	0.108	-0.218	0.269	-0.215	0.368	-0.203	0.218	-0.182	0.208
	70.7	-0.215	0.056	-0.215	0.079	-0.219	0.125	-0.215	0.304	-0.203	0.202	-0.182	0.206
50	8.7	-0.234	0.056	-0.234	0.104	-0.237	0.286	-0.234	0.406	-0.222	0.214	-0.201	0.206
	4.3	-0.234	0.065	-0.234	0.108	-0.237	0.289	-0.234	0.408	-0.222	0.218	-0.201	0.208
	70.7	-0.234	0.056	-0.234	0.079	-0.238	0.125	-0.234	0.344	-0.222	0.202	-0.201	0.206
55	8.7	-0.253	0.056	-0.253	0.104	-0.256	0.306	-0.253	0.436	-0.241	0.214	-0.220	0.206
	4.3	-0.253	0.065	-0.253	0.108	-0.256	0.309	-0.253	0.438	-0.241	0.218	-0.220	0.208
	70.7	-0.253	0.056	-0.253	0.079	-0.257	0.125	-0.253	0.374	-0.241	0.202	-0.220	0.206
60	8.7	-0.272	0.056	-0.272	0.104	-0.275	0.326	-0.272	0.466	-0.250	0.214	-0.239	0.206
	4.3	-0.272	0.065	-0.272	0.108	-0.275	0.329	-0.272	0.468	-0.250	0.218	-0.239	0.208
	70.7	-0.272	0.056	-0.272	0.079	-0.276	0.125	-0.272	0.424	-0.250	0.202	-0.239	0.206
65	8.7	-0.291	0.056	-0.291	0.104	-0.294	0.346	-0.291	0.506	-0.258	0.214	-0.258	0.206
	4.3	-0.291	0.065	-0.291	0.108	-0.294	0.349	-0.291	0.508	-0.258	0.218	-0.258	0.208
	70.7	-0.291	0.056	-0.291	0.079	-0.295	0.125	-0.291	0.464	-0.258	0.202	-0.258	0.206
70	8.7	-0.310	0.056	-0.310	0.104	-0.313	0.366	-0.310	0.536	-0.327	0.214	-0.347	0.206
	4.3	-0.310	0.065	-0.310	0.108	-0.313	0.369	-0.310	0.538	-0.327	0.218	-0.347	0.208
	70.7	-0.310	0.056	-0.310	0.079	-0.314	0.125	-0.310	0.494	-0.327	0.202	-0.347	0.206
75	8.7	-0.329	0.056	-0.329	0.104	-0.332	0.386	-0.329	0.566	-0.336	0.214	-0.366	0.206
	4.3	-0.329	0.065	-0.329	0.108	-0.332	0.389	-0.329	0.568	-0.336	0.218	-0.366	0.208
	70.7	-0.329	0.056	-0.329	0.079	-0.333	0.125	-0.329	0.524	-0.336	0.202	-0.366	0.206
80	8.7	-0.348	0.056	-0.348	0.104	-0.351	0.406	-0.348	0.606	-0.357	0.214	-0.386	0.206
	4.3	-0.348	0.065	-0.348	0.108	-0.351	0.409	-0.348	0.608	-0.357	0.218	-0.386	0.208
	70.7	-0.348	0.056	-0.348	0.079	-0.352	0.125	-0.348	0.564	-0.357	0.202	-0.386	0.206
85	8.7	-0.367	0.056	-0.367	0.104	-0.370	0.426	-0.367	0.636	-0.376	0.214	-0.406	0.206
	4.3	-0.367	0.065	-0.367	0.108	-0.370	0.429	-0.367	0.638	-0.376	0.218	-0.406	0.208
	70.7	-0.367	0.056	-0.367	0.079	-0.371	0.125	-0.367	0.594	-0.376	0.202	-0.406	0.206
90	8.7	-0.386	0.056	-0.386	0.104	-0.389	0.446	-0.386	0.666	-0.395	0.214	-0.426	0.206
	4.3	-0.386	0.065	-0.386	0.108	-0.389	0.449	-0.386	0.668	-0.395	0.218	-0.426	0.208
	70.7	-0.386	0.056	-0.386	0.079	-0.390	0.125	-0.386	0.624	-0.395	0.202	-0.426	0.206
95	8.7	-0.405	0.056	-0.405	0.104	-0.408	0.466	-0.405	0.706	-0.414	0.214	-0.446	0.206
	4.3	-0.405	0.065	-0.405	0.108	-0.408	0.469	-0.405	0.708	-0.414	0.218	-0.446	0.208
	70.7	-0.405	0.056	-0.405	0.079	-0.409	0.125	-0.405	0.664	-0.414	0.202	-0.446	0.206



~~CONFIDENTIAL~~

TABLE I.—CONTINUED

(b) M, 0.60.



~~CONFIDENTIAL~~

NACA RM A50J26a

TABLE I.- CONTINUED

(c) M,0.70.

Station (in.)	Lateral dimension (% fuselage radius)	Angle of attack, degrees											
		-4	-2	0	2	4	6	-4	-2	0	2	4	6
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
30	8.7	.073	.005	.046	.012	.031	.008	.046	.016	.030	.008	.047	.016
	48.3	.005	.005	.005	.005	.005	.005	.005	.005	.005	.005	.005	.005
	70.7	.005	.005	.005	.005	.005	.005	.005	.005	.005	.005	.005	.005
35	8.7	.031	-.019	.019	-.015	.003	-.009	-.005	.008	-.003	.003	-.011	-.015
	48.3	-.015	-.027	.019	-.023	-.007	-.018	-.003	-.003	-.003	-.003	-.011	-.015
	70.7	-.026	-.026	.005	-.015	-.005	-.018	-.007	-.007	-.007	-.007	-.018	-.015
36	8.7	.006	-.013	-.013	-.018	-.003	-.013	-.030	-.016	-.011	.013	-.045	-.058
	48.3	-.003	-.033	-.018	-.038	-.008	-.026	-.026	-.018	-.018	-.017	-.045	-.048
	70.7	-.005	-.031	-.018	-.028	-.005	-.022	-.022	-.018	-.018	-.018	-.045	-.048
37	8.7	.053	-.023	.023	-.011	.031	-.011	-.018	-.011	-.007	-.009	-.011	-.005
	48.3	-.019	-.030	-.023	-.039	-.039	-.025	-.020	-.012	-.012	-.013	-.013	-.025
	70.7	-.031	-.045	-.039	-.039	-.039	-.039	-.039	-.039	-.039	-.039	-.039	-.039
38.50	8.7	-.009	-.017	-.007	-.011	.018	-.019	-.003	-.030	-.013	-.013	-.011	-.001
	48.3	-.019	-.048	-.011	-.041	-.016	-.047	-.016	-.016	-.016	-.016	-.047	-.018
	70.7	-.033	-.045	-.019	-.043	-.013	-.047	-.016	-.016	-.016	-.016	-.047	-.018
31.50	8.7	-.019	-.045	-.038	-.045	-.045	-.045	-.045	-.045	-.045	-.045	-.045	-.045
	48.3	-.015	-.045	-.045	-.045	-.045	-.045	-.045	-.045	-.045	-.045	-.045	-.045
	70.7	-.019	-.045	-.045	-.045	-.045	-.045	-.045	-.045	-.045	-.045	-.045	-.045
34.50	8.7	-.008	-.011	-.005	-.019	-.039	-.039	-.039	-.039	-.039	-.039	-.039	-.005
	48.3	-.010	-.033	-.036	-.039	-.039	-.038	-.039	-.039	-.039	-.039	-.039	-.018
	70.7	-.013	-.037	-.039	-.039	-.039	-.039	-.039	-.039	-.039	-.039	-.039	-.039
36.00	8.7	.003	-.003	-.005	-.003	-.003	-.003	-.003	-.003	-.003	-.003	-.003	-.003
	48.3	-.004	-.004	-.004	-.004	-.004	-.004	-.004	-.004	-.004	-.004	-.004	-.004
	70.7	-.003	-.005	-.005	-.005	-.005	-.005	-.005	-.005	-.005	-.005	-.005	-.005
41.50	8.7	-.028	-.034	-.036	-.041	-.039	-.047	-.038	-.032	-.038	-.038	-.036	-.039
	48.3	-.031	-.037	-.039	-.042	-.043	-.049	-.039	-.038	-.038	-.038	-.038	-.039
	70.7	-.035	-.046	-.046	-.046	-.046	-.046	-.046	-.046	-.046	-.046	-.046	-.039
44.50	8.7	-.011	-.013	-.011	-.011	-.011	-.011	-.011	-.011	-.011	-.011	-.011	-.011
	48.3	-.014	-.013	-.014	-.014	-.014	-.014	-.014	-.014	-.014	-.014	-.014	-.014
	70.7	-.012	-.012	-.012	-.012	-.012	-.012	-.012	-.012	-.012	-.012	-.012	-.012
47.50	8.7	-.005	-.023	-.005	-.028	-.028	-.028	-.028	-.028	-.028	-.028	-.028	-.028
	48.3	-.004	-.013	-.013	-.018	-.018	-.018	-.018	-.018	-.018	-.018	-.018	-.018
	70.7	-.013	-.033	-.039	-.039	-.039	-.039	-.039	-.039	-.039	-.039	-.039	-.039
50.50	8.7	-.019	-.046	-.046	-.051	-.051	-.051	-.051	-.051	-.051	-.051	-.051	-.051
	48.3	-.046	-.045	-.050	-.050	-.050	-.050	-.050	-.050	-.050	-.050	-.050	-.050
	70.7	-.047	-.045	-.051	-.050	-.050	-.050	-.050	-.050	-.050	-.050	-.050	-.050
53.50	8.7	-.013	-.015	-.013	-.018	-.018	-.018	-.018	-.018	-.018	-.018	-.018	-.018
	48.3	-.013	-.014	-.014	-.018	-.018	-.018	-.018	-.018	-.018	-.018	-.018	-.018
	70.7	-.016	-.016	-.016	-.016	-.016	-.016	-.016	-.016	-.016	-.016	-.016	-.016
56.50	8.7	-.016	-.017	-.017	-.018	-.018	-.018	-.018	-.018	-.018	-.018	-.018	-.018
	48.3	-.017	-.017	-.017	-.018	-.018	-.018	-.018	-.018	-.018	-.018	-.018	-.018
	70.7	-.017	-.017	-.017	-.018	-.018	-.018	-.018	-.018	-.018	-.018	-.018	-.018
59.50	8.7	-.009	-.005	-.005	-.002	-.002	-.002	0	-.006	-.002	-.002	-.011	-.009
	48.3	-.010	-.010	-.010	-.005	-.005	-.005	-.005	-.005	-.005	-.005	-.010	-.009
	70.7	-.008	-.008	-.008	-.005	-.005	-.005	-.005	-.005	-.005	-.005	-.010	-.009

Station (in.)	Lateral dimension (% fuselage radius)	Angle of attack, degrees											
		6	8	10	12	14	16	18	6	8	10	12	14
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
10	8.7	-.013	0.128	-.036	0.019	0.034	0.176	-.026	0.005	0.002	0.002	0.002	0.002
	48.3	-.013	0.105	-.027	0.019	0.027	0.177	-.026	0.005	0.002	0.002	0.002	0.002
	70.7	-.013	0.103	-.027	0.019	0.027	0.177	-.026	0.005	0.002	0.002	0.002	0.002
15	8.7	.001	-.023	.019	-.015	.003	-.009	-.005	.008	-.003	.003	-.011	-.015
	48.3	-.015	-.027	.019	-.023	-.007	-.018	-.003	-.003	-.003	-.003	-.011	-.015
	70.7	-.016	-.027	.019	-.023	-.007	-.018	-.003	-.003	-.003	-.003	-.011	-.015
20	8.7	-.004	0.045	-.051	0.059	0.056	0.059	0.061	0.115	-.068	-.068	-.068	-.068
	48.3	-.004	0.045	-.051	0.059	0.057	0.059	0.061	0.115	-.068	-.068	-.068	-.068
	70.7	-.005	0.045	-.051	0.059	0.057	0.059	0.061	0.115	-.068	-.068	-.068	-.068
25	8.7	-.014	0.065	-.027	0.018	0.038	0.038	0.038	0.038	0.077	-.027	0.118	-.031
	48.3	-.014	0.065	-.027	0.018	0.038	0.038	0.038	0.038	0.077	-.027	0.118	-.031
	70.7	-.015	0.065	-.027	0.018	0.038	0.038	0.038	0.038	0.077	-.027	0.118	-.031
30	8.7	-.005	0.023	-.011	0.018	0.027	0.026	0.026	0.026	0.026	0.026	0.026	0.026
	48.3	-.005	0.023	-.011	0.018	0.027	0.026	0.026	0.026	0.026	0.026	0.026	0.026
	70.7	-.005	0.023	-.011	0.018	0.027	0.026	0.026	0.026	0.026	0.026	0.026	0.026
35	8.7	-.005	0.023	-.011	0.018	0.027	0.026	0.026	0.026	0.026	0.026	0.026	0.026
	48.3	-.005	0.023	-.011	0.018	0.027	0.026	0.026	0.026	0.026	0.026	0.026	0.026
	70.7	-.005	0.023	-.011	0.018	0.027	0.026	0.026	0.026	0.026	0.026	0.026	0.026
40	8.7	-.005	0.023	-.011	0.018	0.027	0.026	0.026	0.026	0.026	0.026	0.026	0.026
	48.3	-.005	0.023	-.011	0.018	0.027	0.026	0.026	0.026	0.026	0.026	0.026	0.026
	70.7	-.005	0.023	-.011	0.018	0.027	0.026	0.026	0.026	0.026	0.026	0.026	0.026
45	8.7	-.005	0.023	-.011	0.018	0.027	0.026	0.026	0.026	0.026	0.026	0.026	0.026
	48.3	-.005	0.023	-.011	0.018	0.027	0.026	0.026	0.026	0.026	0.026	0.026	0.026
	70.7	-.005	0.023	-.011	0.018	0.027	0.026	0.026	0.026	0.026	0.026	0.026	0.026
50	8.7	-.005	0.023	-.011	0.018	0.027	0.026	0.026	0.026	0.026	0.026	0.026	0.026
	48.3	-.005	0.023	-.011	0.018	0.027	0.026	0.026	0.026	0.026	0.026	0.026	0.026
	70.7	-.005	0.023	-.011	0.018	0.027	0.026	0.026	0.026	0.026	0.026	0.026	0.026
55	8.7	-.005	0.023	-.011	0.018	0.027	0.026	0.026	0.026	0.026	0.026	0.026	0.026
	48.3	-.005	0.023	-.011	0.018	0.027	0.026	0.026	0.026	0.026	0.026	0.026	0.026
	70.7	-.005	0.023	-.011	0.018	0.027	0.026	0.026	0.026	0.026	0.026	0.026	0.026
60	8.7	-.005	0.023	-.011	0.018	0.027	0.026	0.026	0.026	0.026	0.026	0.026	0.026
	48.3	-.005	0.023	-.011	0.018	0.027	0.026	0.026	0				

~~CONFEDERATE~~

TABLE I.—CONTINUED

(d) M,0.75.



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TABLE I.—CONTINUED

(e) M,0.80.

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TABLE I.—CONTINUED

(F) M, 0.82.

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TABLE I.— CONTINUED

(g) M, 0.84.

Station (in.)	Lateral dimension ($\frac{S}{R}$ fuselage radius)	Angle of attack, degrees											
		-4		-2		0		2		4		6	
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
10	8.7	-0.05	0.009	0.073	0.010	0.019	0.000	0.003	0.011	-0.019	0.000	-0.006	-0.006
	42.3	-0.09	0.009	0.043	0.018	0.019	0.000	0.003	0.019	-0.020	0.000	-0.006	-0.006
	70.7	-0.05	0.006	0.018	0.018	0.019	0.000	0.003	0.013	-0.018	0.000	-0.006	-0.003
15	8.7	-0.03	-0.015	-0.017	-0.020	-0.013	-0.013	-0.019	-0.020	-0.018	-0.018	-0.013	-0.013
	42.3	-0.06	-0.027	-0.014	-0.028	-0.023	-0.022	-0.030	-0.030	-0.028	-0.028	-0.021	-0.021
	70.7	-0.05	-0.026	-0.014	-0.028	-0.023	-0.022	-0.030	-0.030	-0.028	-0.028	-0.021	-0.021
20	8.7	-0.09	-0.006	-0.012	-0.016	-0.013	-0.008	-0.014	-0.014	-0.012	-0.012	-0.017	-0.017
	42.3	-0.09	-0.006	-0.012	-0.016	-0.013	-0.008	-0.014	-0.014	-0.012	-0.012	-0.016	-0.016
	70.7	-0.09	-0.006	-0.012	-0.016	-0.013	-0.008	-0.014	-0.014	-0.012	-0.012	-0.016	-0.016
25	8.7	-0.08	-0.011	-0.009	-0.013	-0.011	-0.003	-0.006	-0.006	-0.003	-0.003	-0.004	-0.004
	42.3	-0.01	-0.011	-0.004	-0.013	-0.011	-0.003	-0.006	-0.006	-0.003	-0.003	-0.017	-0.017
	70.7	-0.05	-0.011	-0.004	-0.013	-0.011	-0.003	-0.006	-0.006	-0.003	-0.003	-0.017	-0.017
30.50	8.7	-0.05	-0.018	-0.013	-0.011	-0.011	-0.004	-0.003	-0.003	-0.003	-0.003	-0.006	-0.006
	42.3	-0.03	-0.018	-0.013	-0.011	-0.011	-0.004	-0.003	-0.003	-0.003	-0.003	-0.006	-0.006
	70.7	-0.03	-0.018	-0.013	-0.011	-0.011	-0.004	-0.003	-0.003	-0.003	-0.003	-0.006	-0.006
31.50	8.7	-0.06	-0.010	-0.017	-0.006	-0.006	-0.008	-0.016	-0.016	-0.010	-0.010	-0.017	-0.017
	42.3	-0.06	-0.010	-0.017	-0.006	-0.006	-0.008	-0.016	-0.016	-0.010	-0.010	-0.017	-0.017
	70.7	-0.06	-0.010	-0.017	-0.006	-0.006	-0.008	-0.016	-0.016	-0.010	-0.010	-0.017	-0.017
34.50	8.7	-0.08	-0.015	-0.013	-0.006	-0.006	-0.006	-0.006	-0.006	-0.006	-0.006	-0.017	-0.017
	42.3	-0.08	-0.015	-0.013	-0.006	-0.006	-0.006	-0.006	-0.006	-0.006	-0.006	-0.017	-0.017
	70.7	-0.08	-0.015	-0.013	-0.006	-0.006	-0.006	-0.006	-0.006	-0.006	-0.006	-0.017	-0.017
38.00	8.7	-0.05	-0.011	-0.017	-0.006	-0.006	-0.006	-0.011	-0.011	-0.006	-0.006	-0.017	-0.017
	42.3	-0.05	-0.011	-0.017	-0.006	-0.006	-0.006	-0.011	-0.011	-0.006	-0.006	-0.017	-0.017
	70.7	-0.05	-0.011	-0.017	-0.006	-0.006	-0.006	-0.011	-0.011	-0.006	-0.006	-0.017	-0.017
43.50	8.7	-0.04	-0.015	-0.014	-0.016	-0.015	-0.006	-0.006	-0.006	-0.006	-0.006	-0.017	-0.017
	42.3	-0.04	-0.015	-0.014	-0.016	-0.015	-0.006	-0.006	-0.006	-0.006	-0.006	-0.017	-0.017
	70.7	-0.04	-0.015	-0.014	-0.016	-0.015	-0.006	-0.006	-0.006	-0.006	-0.006	-0.017	-0.017
44.50	8.7	-0.05	-0.013	-0.013	-0.013	-0.013	-0.006	-0.006	-0.006	-0.006	-0.006	-0.017	-0.017
	42.3	-0.05	-0.013	-0.013	-0.013	-0.013	-0.006	-0.006	-0.006	-0.006	-0.006	-0.017	-0.017
	70.7	-0.05	-0.013	-0.013	-0.013	-0.013	-0.006	-0.006	-0.006	-0.006	-0.006	-0.017	-0.017
47.50	8.7	-0.01	-0.019	-0.019	-0.006	-0.006	-0.006	-0.022	-0.022	-0.006	-0.006	-0.017	-0.017
	42.3	-0.01	-0.019	-0.019	-0.006	-0.006	-0.006	-0.022	-0.022	-0.006	-0.006	-0.017	-0.017
	70.7	-0.01	-0.019	-0.019	-0.006	-0.006	-0.006	-0.022	-0.022	-0.006	-0.006	-0.017	-0.017
50.50	8.7	-0.03	-0.022	-0.022	-0.006	-0.006	-0.006	-0.022	-0.022	-0.006	-0.006	-0.017	-0.017
	42.3	-0.03	-0.022	-0.022	-0.006	-0.006	-0.006	-0.022	-0.022	-0.006	-0.006	-0.017	-0.017
	70.7	-0.03	-0.022	-0.022	-0.006	-0.006	-0.006	-0.022	-0.022	-0.006	-0.006	-0.017	-0.017
53.50	8.7	-0.05	-0.022	-0.022	-0.006	-0.006	-0.006	-0.022	-0.022	-0.006	-0.006	-0.017	-0.017
	42.3	-0.05	-0.022	-0.022	-0.006	-0.006	-0.006	-0.022	-0.022	-0.006	-0.006	-0.017	-0.017
	70.7	-0.05	-0.022	-0.022	-0.006	-0.006	-0.006	-0.022	-0.022	-0.006	-0.006	-0.017	-0.017
56.50	8.7	-0.05	-0.022	-0.022	-0.006	-0.006	-0.006	-0.022	-0.022	-0.006	-0.006	-0.017	-0.017
	42.3	-0.05	-0.022	-0.022	-0.006	-0.006	-0.006	-0.022	-0.022	-0.006	-0.006	-0.017	-0.017
	70.7	-0.05	-0.022	-0.022	-0.006	-0.006	-0.006	-0.022	-0.022	-0.006	-0.006	-0.017	-0.017
59.50	8.7	-0.05	-0.022	-0.022	-0.006	-0.006	-0.006	-0.022	-0.022	-0.006	-0.006	-0.017	-0.017
	42.3	-0.05	-0.022	-0.022	-0.006	-0.006	-0.006	-0.022	-0.022	-0.006	-0.006	-0.017	-0.017
	70.7	-0.05	-0.022	-0.022	-0.006	-0.006	-0.006	-0.022	-0.022	-0.006	-0.006	-0.017	-0.017

Station (in.)	Lateral dimension ($\frac{S}{R}$ fuselage radius)	Angle of attack, degrees											
		8		10		12		14		16		18	
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
10	8.7	-0.007	0.005	-0.003	0.018	-0.006	0.002	-0.006	0.011	-0.006	0.002	-0.007	0.002
	42.3	-0.011	0.009	-0.006	0.018	-0.006	0.002	-0.006	0.011	-0.006	0.002	-0.007	0.002
	70.7	-0.009	0.006	-0.006	0.018	-0.006	0.002	-0.006	0.011	-0.006	0.002	-0.007	0.002
15	8.7	-0.02	0.003	-0.016	0.008	-0.007	0.014	-0.006	0.019	-0.006	0.003	-0.017	0.003
	42.3	-0.027	0.003	-0.016	0.008	-0.007	0.014	-0.006	0.019	-0.006	0.003	-0.017	0.003
	70.7	-0.027	0.003	-0.016	0.008	-0.007	0.014	-0.006	0.019	-0.006	0.003	-0.017	0.003
20	8.7	-0.009	0.005	-0.007	0.018	-0.006	0.008	-0.006	0.016	-0.006	0.007	-0.007	0.007
	42.3	-0.007	0.005	-0.007	0.018	-0.006	0.008	-0.006	0.016	-0.006	0.007	-0.007	0.007
	70.7	-0.007	0.005	-0.007	0.018	-0.006	0.008	-0.006	0.016	-0.006	0.007	-0.007	0.007
25	8.7	-0.009	0.003	-0.007	0.008	-0.006	0.004	-0.006	0.008	-0.006	0.003	-0.007	0.003
	42.3	-0.009	0.003	-0.007	0.008	-0.006	0.004	-0.006	0.008	-0.006	0.003	-0.007	0.003
	70.7	-0.009	0.003	-0.007	0.008	-0.006	0.004	-0.006	0.008	-0.006	0.003	-0.007	0.003
30.50	8.7	-0.008	0.004	-0.008	0.019	-0.006	0.008	-0.006	0.016	-0.006	0.003	-0.007	0.003
	42.3	-0.007	0.004	-0.008	0.019	-0.006	0.008	-0.006	0.016	-0.006	0.003	-0.007	0.003
	70.7	-0.007	0.004	-0.008	0.019	-0.006	0.008	-0.006	0.016	-0.006	0.003	-0.007	0.003
31.50	8.7	-0.011	0.006	-0.011	0.006	-0.006	0.011	-0.006	0.016	-0.006	0.001	-0.011	0.001
	42.3	-0.011	0.006	-0.011	0.006	-0.006	0.011	-0.006	0.016	-0.006	0.001	-0.011	0.001
	70.7	-0.011	0.006	-0.011	0.006	-0.006	0.011	-0.006	0.016	-0.006	0.001	-0.011	0.001
34.50	8.7	-0.017	0.015	-0.011	0.008	-0.016	0.010	-0.006	0.016	-0.006	0.001	-0.017	0.001
	42.3	-0.017	0.015	-0.011	0.008	-0.016	0.010	-0.006	0.016	-0.006	0.001	-0.017	0.001
	70.7	-0.017	0.015	-0.011	0.008	-0.016	0.010	-0.006	0.016	-0.006	0.001	-0.017	0.001
35.00	8.7	-0.008	0.004	-0.009	0.018	-0.006	0.005	-0.007	0.013	-0.006	0.001	-0.008	0.001
	42.3	-0.008	0.004	-0.009	0.018	-0.00							

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TABLE I.—CONTINUED

(h) M, 0.86.

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TABLE I.— CONTINUED

(i) M₀.88.

Spanwise position (in.)	Lateral camber (5 Camber radii)	Angle of attack, degrees									
		10	10	10	10	10	10	10	10	10	10
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
10	8.7	-0.005	0.005	0.020	0.000	0.005	0.000	0.005	0.000	0.005	0.000
	40.3	-0.005	0.005	0.020	0.000	0.005	0.000	0.005	0.000	0.005	0.000
	70.7	-0.005	0.005	0.020	0.000	0.005	0.000	0.005	0.000	0.005	0.000
15	8.7	-0.011	-0.005	0.013	-0.013	-0.003	-0.008	-0.011	-0.013	-0.008	-0.005
	40.3	-0.015	-0.015	0.020	-0.020	-0.005	-0.008	-0.015	-0.020	-0.005	-0.005
	70.7	-0.015	-0.015	0.020	-0.020	-0.005	-0.008	-0.015	-0.020	-0.005	-0.005
20	8.7	-0.020	-0.015	0.018	-0.020	-0.013	-0.018	-0.020	-0.020	-0.015	-0.015
	40.3	-0.025	-0.025	0.020	-0.025	-0.015	-0.020	-0.025	-0.025	-0.020	-0.020
	70.7	-0.025	-0.025	0.020	-0.025	-0.015	-0.020	-0.025	-0.025	-0.020	-0.020
25	8.7	-0.026	-0.020	0.016	-0.020	-0.013	-0.016	-0.020	-0.020	-0.015	-0.015
	40.3	-0.031	-0.025	0.018	-0.025	-0.015	-0.020	-0.025	-0.025	-0.020	-0.020
	70.7	-0.031	-0.025	0.018	-0.025	-0.015	-0.020	-0.025	-0.025	-0.020	-0.020
30.00	8.7	-0.036	-0.031	0.013	-0.030	-0.020	-0.024	-0.030	-0.030	-0.020	-0.020
	40.3	-0.041	-0.036	0.015	-0.035	-0.020	-0.028	-0.035	-0.035	-0.020	-0.020
	70.7	-0.041	-0.036	0.015	-0.035	-0.020	-0.028	-0.035	-0.035	-0.020	-0.020
35.00	8.7	-0.041	-0.041	0.010	-0.035	-0.020	-0.024	-0.035	-0.035	-0.020	-0.020
	40.3	-0.046	-0.046	0.012	-0.040	-0.020	-0.028	-0.040	-0.040	-0.020	-0.020
	70.7	-0.046	-0.046	0.012	-0.040	-0.020	-0.028	-0.040	-0.040	-0.020	-0.020
41.00	8.7	-0.046	-0.046	0.008	-0.040	-0.020	-0.024	-0.040	-0.040	-0.020	-0.020
	40.3	-0.051	-0.051	0.010	-0.045	-0.020	-0.028	-0.045	-0.045	-0.020	-0.020
	70.7	-0.051	-0.051	0.010	-0.045	-0.020	-0.028	-0.045	-0.045	-0.020	-0.020
45.00	8.7	-0.051	-0.051	0.006	-0.045	-0.020	-0.024	-0.045	-0.045	-0.020	-0.020
	40.3	-0.056	-0.056	0.008	-0.050	-0.020	-0.028	-0.050	-0.050	-0.020	-0.020
	70.7	-0.056	-0.056	0.008	-0.050	-0.020	-0.028	-0.050	-0.050	-0.020	-0.020
51.00	8.7	-0.056	-0.056	0.004	-0.050	-0.020	-0.024	-0.050	-0.050	-0.020	-0.020
	40.3	-0.061	-0.061	0.006	-0.055	-0.020	-0.028	-0.055	-0.055	-0.020	-0.020
	70.7	-0.061	-0.061	0.006	-0.055	-0.020	-0.028	-0.055	-0.055	-0.020	-0.020
55.00	8.7	-0.061	-0.061	0.002	-0.055	-0.020	-0.024	-0.055	-0.055	-0.020	-0.020
	40.3	-0.066	-0.066	0.004	-0.060	-0.020	-0.028	-0.060	-0.060	-0.020	-0.020
	70.7	-0.066	-0.066	0.004	-0.060	-0.020	-0.028	-0.060	-0.060	-0.020	-0.020
59.00	8.7	-0.066	-0.066	0.000	-0.060	-0.020	-0.024	-0.060	-0.060	-0.020	-0.020
	40.3	-0.071	-0.071	0.002	-0.065	-0.020	-0.028	-0.065	-0.065	-0.020	-0.020
	70.7	-0.071	-0.071	0.002	-0.065	-0.020	-0.028	-0.065	-0.065	-0.020	-0.020
65.00	8.7	-0.071	-0.071	-0.002	-0.065	-0.020	-0.024	-0.065	-0.065	-0.020	-0.020
	40.3	-0.076	-0.076	-0.002	-0.070	-0.020	-0.028	-0.070	-0.070	-0.020	-0.020
	70.7	-0.076	-0.076	-0.002	-0.070	-0.020	-0.028	-0.070	-0.070	-0.020	-0.020
70.00	8.7	-0.076	-0.076	-0.004	-0.070	-0.020	-0.024	-0.070	-0.070	-0.020	-0.020
	40.3	-0.081	-0.081	-0.004	-0.075	-0.020	-0.028	-0.075	-0.075	-0.020	-0.020
	70.7	-0.081	-0.081	-0.004	-0.075	-0.020	-0.028	-0.075	-0.075	-0.020	-0.020
75.00	8.7	-0.081	-0.081	-0.006	-0.075	-0.020	-0.024	-0.075	-0.075	-0.020	-0.020
	40.3	-0.086	-0.086	-0.006	-0.080	-0.020	-0.028	-0.080	-0.080	-0.020	-0.020
	70.7	-0.086	-0.086	-0.006	-0.080	-0.020	-0.028	-0.080	-0.080	-0.020	-0.020
80.00	8.7	-0.086	-0.086	-0.008	-0.080	-0.020	-0.024	-0.080	-0.080	-0.020	-0.020
	40.3	-0.091	-0.091	-0.008	-0.085	-0.020	-0.028	-0.085	-0.085	-0.020	-0.020
	70.7	-0.091	-0.091	-0.008	-0.085	-0.020	-0.028	-0.085	-0.085	-0.020	-0.020
85.00	8.7	-0.091	-0.091	-0.010	-0.085	-0.020	-0.024	-0.085	-0.085	-0.020	-0.020
	40.3	-0.096	-0.096	-0.010	-0.090	-0.020	-0.028	-0.090	-0.090	-0.020	-0.020
	70.7	-0.096	-0.096	-0.010	-0.090	-0.020	-0.028	-0.090	-0.090	-0.020	-0.020
90.00	8.7	-0.096	-0.096	-0.012	-0.090	-0.020	-0.024	-0.090	-0.090	-0.020	-0.020
	40.3	-0.101	-0.101	-0.012	-0.095	-0.020	-0.028	-0.095	-0.095	-0.020	-0.020
	70.7	-0.101	-0.101	-0.012	-0.095	-0.020	-0.028	-0.095	-0.095	-0.020	-0.020
95.00	8.7	-0.101	-0.101	-0.014	-0.095	-0.020	-0.024	-0.095	-0.095	-0.020	-0.020
	40.3	-0.106	-0.106	-0.014	-0.100	-0.020	-0.028	-0.100	-0.100	-0.020	-0.020
	70.7	-0.106	-0.106	-0.014	-0.100	-0.020	-0.028	-0.100	-0.100	-0.020	-0.020
100.00	8.7	-0.106	-0.106	-0.016	-0.100	-0.020	-0.024	-0.100	-0.100	-0.020	-0.020
	40.3	-0.111	-0.111	-0.016	-0.105	-0.020	-0.028	-0.105	-0.105	-0.020	-0.020
	70.7	-0.111	-0.111	-0.016	-0.105	-0.020	-0.028	-0.105	-0.105	-0.020	-0.020
105.00	8.7	-0.111	-0.111	-0.018	-0.105	-0.020	-0.024	-0.105	-0.105	-0.020	-0.020
	40.3	-0.116	-0.116	-0.018	-0.110	-0.020	-0.028	-0.110	-0.110	-0.020	-0.020
	70.7	-0.116	-0.116	-0.018	-0.110	-0.020	-0.028	-0.110	-0.110	-0.020	-0.020
110.00	8.7	-0.116	-0.116	-0.020	-0.110	-0.020	-0.024	-0.110	-0.110	-0.020	-0.020
	40.3	-0.121	-0.121	-0.020	-0.115	-0.020	-0.028	-0.115	-0.115	-0.020	-0.020
	70.7	-0.121	-0.121	-0.020	-0.115	-0.020	-0.028	-0.115	-0.115	-0.020	-0.020
115.00	8.7	-0.121	-0.121	-0.022	-0.115	-0.020	-0.024	-0.115	-0.115	-0.020	-0.020
	40.3	-0.126	-0.126	-0.022	-0.120	-0.020	-0.028	-0.120	-0.120	-0.020	-0.020
	70.7	-0.126	-0.126	-0.022	-0.120	-0.020	-0.028	-0.120	-0.120	-0.020	-0.020
120.00	8.7	-0.126	-0.126	-0.024	-0.120	-0.020	-0.024	-0.120	-0.120	-0.020	-0.020
	40.3	-0.131	-0.131	-0.024	-0.125	-0.020	-0.028	-0.125	-0.125	-0.020	-0.020
	70.7	-0.131	-0.131	-0.024	-0.125	-0.020	-0.028	-0.125	-0.125	-0.020	-0.020
125.00	8.7	-0.131	-0.131	-0.026	-0.125	-0.020	-0.024	-0.125	-0.125	-0.020	-0.020
	40.3	-0.136	-0.136	-0.026	-0.130	-0.020	-0.028	-0.130	-0.130	-0.020	-0.020
	70.7	-0.136	-0.136	-0.026	-0.130	-0.020	-0.028	-0.130	-0.130	-0.020	-0.020
130.00	8.7	-0.136	-0.136	-0.028	-0.130	-0.020	-0.024	-0.130	-0.130	-0.020	-0.020
	40.3	-0.141	-0.141	-0.028	-0.135	-0.020	-0.028	-0.135	-0.135	-0.020	-0.020
	70.7	-0.141	-0.141	-0.028	-0.135	-0.020	-0.028	-0.135	-0.135	-0.020	-0.020
135.00	8.7	-0.141	-0.141	-0.030	-0.135	-0.020	-0.024	-0.135	-0.135	-0.020	-0.020
	40.3	-0.146	-0.146	-0.030	-0.140	-0.020	-0.028	-0.140	-0.140	-0.020	-0.020
	70.7	-0.146	-0.146	-0.030	-0.140	-0.020	-0.028	-0.140	-0.140	-0.020	-0.020
140.00	8.7	-0.146	-0.146	-0.032	-0.140	-0.020	-0.024	-0.140	-0.140	-0.020	-0.020
	40.3	-0.151	-0.151	-0.032	-0.145	-0.020	-0.028	-0.145	-0.145	-0.020	-0.020
	70.7	-0.151	-0.151	-0.032	-0.145	-0.020	-0.028	-0.145	-0.145	-0.020	-0.020
145.00	8.7	-0.151	-0.151	-0.034	-0.145	-0.020	-0.024	-0.145	-0.145	-0.020	-0.020
	40.3	-0.156	-0.156	-0.034	-0.150	-0.020	-0.028	-0.150	-0.150	-0.020	-0.020
	70.7	-0.156	-0.156	-0.034	-0.150	-0.020	-0.028	-0.150	-0.150	-0.020	-0.020
150.00	8.7	-0.156	-0.156	-0.036	-0.150	-0.020	-0.024	-0.150	-0.150	-0.020	-0.020
	40.3	-0.161	-0.161	-0.036	-0.155	-0.020	-0.028	-0.155	-0.155	-0.020	-0.020
	70.7	-0.161	-0.161	-0.036	-0.155	-0.020	-0.028	-0.155	-0.155	-0.020	-0.020
155.00	8.7	-0.161	-0.161	-0.038	-0.155	-0.020	-0.024	-0.155	-0.155	-0.020	-0.020
	40.3	-0.166	-0.166	-0.038	-0.160	-0.020	-0.028	-0.160	-0.160	-0.020	-0.020
	70.7	-0.166	-0.166	-0.038	-0.16						

TABLE I.—CONTINUED

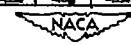
(j) M, O.90.



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TABLE I.—CONTINUED

(k) M, O.92.

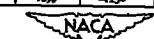


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TABLE I.— CONCLUDED

(1) M, 0.94.



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Geplaatst door:

TABLE II.— PRESSURE COEFFICIENTS ON A FUSELAGE IN COMBINATION WITH
A WING HAVING A SWEEPBACK ANGLE OF 45° AND AN ASPECT RATIO OF 4.

(a) M, O. 40.

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TABLE II.—CONTINUED

(b) M, 0.60.

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TABLE II.— CONTINUED

(c) M₀.70.

Sta- tion (in.)	Percent fuselage radius	Angle of attack, degrees									
		-4		-2		0		2		4	
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
10	.8-.7 M ₂ .3 T ₀ .7	---	---	.053 .054 .059	.003 .007 .008	.350 .039 .031	.029 .063 .021	.080 .084 .083	.051 .064 .060	.031 .031 .031	.035 .036 .035
15	.8-.7 M ₂ .3 T ₀ .7	---	---	.062 .064 .061	-.050 -.053 -.059	.069 .061 0	.061 -.066 -.007	-.011 -.026 0	.043 -.001 0	-.017 -.015 -.009	.046 -.031 -.031
20	.8-.7 M ₂ .3 T ₀ .7	---	---	-.009 -.012 -.001	-.045 -.047 -.041	-.167 -.160 -.021	-.167 -.160 -.021	-.030 -.030 -.021	-.046 -.046 -.021	-.046 -.046 -.006	0
25	.8-.7 M ₂ .3 T ₀ .7	---	---	-.012 -.015 -.003	-.045 -.048 -.045	-.167 -.160 -.021	-.167 -.160 -.021	-.060 -.060 -.021	-.046 -.046 -.021	-.046 -.046 -.013	0
30.50	.8-.7 M ₂ .3 T ₀ .7	---	---	-.018 -.019 -.019	-.051 -.054 -.046	-.167 -.160 -.039	-.167 -.160 -.039	-.040 -.036 -.021	-.038 -.035 -.021	-.043 -.043 -.021	0
31.50	.8-.7 M ₂ .3 T ₀ .7	---	---	-.018 -.020 -.018	-.048 -.050 -.049	-.167 -.160 -.030	-.167 -.160 -.030	-.010 -.011 -.011	-.038 -.036 -.021	-.050 -.048 -.021	0
34.50	.8-.7 M ₂ .3 T ₀ .7	---	---	-.009 -.011 -.006	-.047 -.049 -.045	-.069 -.061 -.021	-.069 -.061 -.021	-.073 -.070 -.021	-.046 -.043 -.021	-.103 -.098 -.021	0
38.00	.8-.7 M ₂ .3 T ₀ .7	---	---	-.014 -.014 -.019	-.050 -.053 -.051	-.060 -.063 -.021	-.060 -.063 -.021	-.111 -.107 -.021	-.061 -.059 -.021	-.120 -.119 -.021	0
41.50	.8-.7 M ₂ .3 T ₀ .7	---	---	0 -.007 -.005	-.056 -.101 -.110	-.167 -.160 -.050	-.167 -.160 -.050	-.066 -.065 -.021	-.081 -.075 -.021	-.127 -.121 -.021	0
44.50	.8-.7 M ₂ .3 T ₀ .7	---	---	-.014 -.014 -.014	-.110 -.115 -.115	-.167 -.160 -.021	-.167 -.160 -.021	-.067 -.067 -.021	-.046 -.046 -.021	0	0
47.50	.8-.7 M ₂ .3 T ₀ .7	---	---	-.006 -.006 -.006	-.111 -.110 -.110	-.167 -.160 -.021	-.167 -.160 -.021	-.067 -.067 -.021	-.046 -.046 -.021	0	0
50.50	.8-.7 M ₂ .3 T ₀ .7	---	---	-.001 -.001 -.009	-.051 -.052 -.049	-.167 -.160 -.123	-.167 -.160 -.123	-.068 -.065 -.021	-.099 -.095 -.021	-.137 -.131 -.021	0
53.50	.8-.7 M ₂ .3 T ₀ .7	---	---	-.001 -.001 -.001	-.056 -.058 -.058	-.167 -.160 -.021	-.167 -.160 -.021	-.068 -.065 -.021	-.046 -.046 -.021	0	0
56.50	.8-.7 M ₂ .3 T ₀ .7	---	---	-.009 -.009 -.009	-.050 -.052 -.047	-.167 -.160 -.020	-.167 -.160 -.020	-.068 -.065 -.020	-.046 -.046 -.020	0	0
59.00	.8-.7 M ₂ .3 T ₀ .7	-.010 -.009 -.011	-.060 -.060 -.058	-.030 -.030 -.030	-.041 -.040 -.031	-.167 -.160 -.021	-.167 -.160 -.021	-.041 -.040 -.021	-.048 -.043 -.021	-.058 -.053 -.021	0
Sta- tion (in.)	Percent fuselage radius	Angle of attack, degrees									
		6		8		10		12		14	
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
10	.8-.7 M ₂ .3 T ₀ .7	-.009 -.011 -.011	.161 -.009 -.005	-.088 -.089 -.081	.143 -.099 -.095	-.080 -.083 -.083	.156 -.088 -.088	-.041 -.045 -.045	.153 -.088 -.088	-.027 -.031 -.031	.021 0 0
15	.8-.7 M ₂ .3 T ₀ .7	-.030 -.030 -.031	.069 -.030 -.021	-.046 -.046 -.049	.066 -.060 -.068	-.007 -.009 -.001	.160 -.063 -.063	-.029 -.030 -.021	.161 -.063 -.063	-.047 -.049 -.039	.021 0 0
20	.8-.7 M ₂ .3 T ₀ .7	-.008 -.008 -.008	-.016 -.016 -.006	-.026 -.026 -.016	-.026 -.026 0	-.000 -.003 0	-.049 -.050 -.013	-.048 -.050 -.013	-.048 -.049 -.013	-.048 -.049 -.013	0
25	.8-.7 M ₂ .3 T ₀ .7	-.007 -.007 -.009	-.013 -.013 -.011	-.033 -.033 -.021	-.034 -.034 0	-.039 -.039 0	-.049 -.049 0	-.049 -.049 0	-.049 -.049 0	-.049 -.049 0	0
28.50	.8-.7 M ₂ .3 T ₀ .7	-.001 -.001 -.001	.020 -.013 -.011	-.050 -.052 -.057	-.046 -.048 -.051	-.048 -.049 -.051	-.077 -.078 -.051	-.121 -.122 -.081	-.081 -.121 -.121	-.144 -.146 -.146	0
31.50	.8-.7 M ₂ .3 T ₀ .7	-.003 -.003 -.003	.040 -.032 -.032	-.073 -.073 -.068	-.068 -.068 0	-.051 -.051 -.068	.100 -.055 -.055	-.089 -.118 -.115	-.106 -.110 -.110	-.146 -.148 -.148	0
34.50	.8-.7 M ₂ .3 T ₀ .7	-.113 -.113 -.113	.019 -.019 -.011	-.066 -.066 -.061	-.069 -.069 -.061	-.128 -.128 -.121	.150 -.072 -.072	-.175 -.175 -.072	-.175 -.175 -.072	-.165 -.165 -.072	0
38.00	.8-.7 M ₂ .3 T ₀ .7	-.126 -.121 -.123	-.027 -.027 -.027	-.167 -.167 -.160	-.167 -.167 -.170	-.167 -.167 -.167	-.167 -.167 -.167	-.127 -.127 -.127	-.126 -.126 -.126	-.141 -.141 -.141	0
41.50	.8-.7 M ₂ .3 T ₀ .7	-.178 -.180 -.185	.079 -.080 -.080	-.267 -.265 -.262	-.183 -.183 -.180	-.229 -.229 -.182	.179 -.171 -.171	-.133 -.133 -.133	-.171 -.171 -.171	-.171 -.171 -.171	0
44.50	.8-.7 M ₂ .3 T ₀ .7	---	-.027	---	-.028	---	-.148	---	-.127	---	0
47.50	.8-.7 M ₂ .3 T ₀ .7	-.177 -.176 -.176	.049 -.050 -.051	-.153 -.154 -.172	-.071 -.073 -.069	-.169 -.169 -.161	.118 -.106 -.103	-.089 -.089 -.075	-.116 -.116 -.110	-.147 -.147 -.140	0
50.50	.8-.7 M ₂ .3 T ₀ .7	-.159 -.158 -.158	-.019 -.020 -.020	-.029 -.029 -.027	-.029 -.029 -.027	-.050 -.050 -.052	-.070 -.070 -.052	-.050 -.050 -.052	-.115 -.115 -.115	-.145 -.145 -.145	0
53.50	.8-.7 M ₂ .3 T ₀ .7	---	-.011	---	-.012	---	-.027	---	-.024	---	0
56.50	.8-.7 M ₂ .3 T ₀ .7	-.180 -.178 -.178	.008 -.010 -.011	-.100 -.101 -.101	-.060 -.061 -.061	-.119 -.120 -.068	.035 -.035 -.068	-.188 -.188 -.068	-.043 -.043 -.068	-.139 -.139 -.078	0
59.00	.8-.7 M ₂ .3 T ₀ .7	-.169 -.169 -.169	-.009 -.010 -.010	-.060 -.060 -.060	-.018 -.018 -.021	-.060 -.060 -.021	-.060 -.060 -.021	-.031 -.031 -.021	-.031 -.031 -.021	-.103 -.103 -.021	0

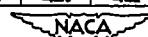
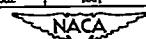
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TABLE II.—CONTINUED

(d) M, 0.75.

Station (in.)	Percent fuselage radius	Angle of attack, degrees									
		-6		0		6		8		10	
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
10	.5-T .45-3 .70-T	.078 .067 .060	-0.008 .008 -.001	.079 .068 .062	.012 .012 .012	.080 .067 .061	.006 .006 .009	---	---	.061 .059 .058	.071 .063 .060
15	.5-T .45-3 .70-T	.048 .045 .043	-0.083 .072 -.068	.045 .040 .035	-.018 .012 -.008	.018 .010 -.008	-.005 -.005 -.005	---	---	.042 .031 .031	.054 .048 .048
20	.5-T .45-3 .70-T	.047 .042 .040	-0.017 .009 -.009	.010 .011 .010	-.004 .004 -.005	.010 .008 -.003	-.005 -.005 -.003	---	---	.047 .031 .031	---
25	.5-T .45-3 .70-T	.009 .003 .001	-0.064 .060 -.060	-.118 .080 -.078	-.047 .031 -.031	-.007 -.005 -.005	-.008 -.008 -.008	---	---	.051 .049 .049	.057 .050 .050
30.50	.5-T .45-3 .70-T	.008 .003 .001	-0.008 .003 -.003	-.015 .008 -.012	-.004 .004 -.004	-.005 -.005 -.004	-.001 -.001 -.003	---	---	.062 .050 .049	0
31.50	.5-T .45-3 .70-T	.008 .003 .001	-0.008 .003 -.003	-.015 .008 -.012	-.004 .004 -.004	-.005 -.005 -.004	-.001 -.001 -.003	---	---	.062 .050 .049	.005
34.50	.5-T .45-3 .70-T	.008 .003 .001	-0.008 .003 -.003	-.015 .008 -.012	-.004 .004 -.004	-.005 -.005 -.004	-.001 -.001 -.003	---	---	.060 .048 .048	.004
36.00	.5-T .45-3 .70-T	.008 .003 .001	-0.008 .003 -.003	-.015 .008 -.012	-.004 .004 -.004	-.005 -.005 -.004	-.001 -.001 -.003	---	---	.060 .048 .048	.004
41.00	.5-T .45-3 .70-T	.008 .003 .001	-0.008 .003 -.003	-.015 .008 -.012	-.004 .004 -.004	-.005 -.005 -.004	-.001 -.001 -.003	---	---	.062 .050 .049	.005
44.50	.5-T .45-3 .70-T	.008 .003 .001	-0.008 .003 -.003	-.015 .008 -.012	-.004 .004 -.004	-.005 -.005 -.004	-.001 -.001 -.003	---	---	.062 .050 .049	.005
47.50	.5-T .45-3 .70-T	.008 .003 .001	-0.008 .003 -.003	-.015 .008 -.012	-.004 .004 -.004	-.005 -.005 -.004	-.001 -.001 -.003	---	---	.060 .048 .048	.004
50.00	.5-T .45-3 .70-T	.008 .003 .001	-0.008 .003 -.003	-.015 .008 -.012	-.004 .004 -.004	-.005 -.005 -.004	-.001 -.001 -.003	---	---	.062 .050 .049	.005
53.50	.5-T .45-3 .70-T	.008 .003 .001	-0.008 .003 -.003	-.015 .008 -.012	-.004 .004 -.004	-.005 -.005 -.004	-.001 -.001 -.003	---	---	.062 .050 .049	.005
56.50	.5-T .45-3 .70-T	.008 .003 .001	-0.008 .003 -.003	-.015 .008 -.012	-.004 .004 -.004	-.005 -.005 -.004	-.001 -.001 -.003	---	---	.062 .050 .049	.005
59.50	.5-T .45-3 .70-T	.008 .003 .001	-0.008 .003 -.003	-.015 .008 -.012	-.004 .004 -.004	-.005 -.005 -.004	-.001 -.001 -.003	---	---	.062 .050 .049	.005
60	.5-T .45-3 .70-T	0	0	0	0	0	0	0	0	0	0
Station (in.)	Percent fuselage radius	Angle of attack, degrees									
		6	8	10	12	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
10	.5-T .45-3 .70-T	.003 .003 .001	0.000 .000 -.000	0.000 .000 -.000	0.123 .111 -.001	0.039 .033 -.001	0.269 .198 -.001	0.000 -.000 -.000	0.200 .161 -.001	0.000 -.000 -.000	0.200 .161 -.001
15	.5-T .45-3 .70-T	.003 .003 .001	0.000 .000 -.000	0.000 .000 -.000	0.100 .099 -.001	0.043 .037 -.001	0.283 .204 -.001	0.000 -.000 -.000	0.165 .126 -.001	0.000 -.000 -.000	0.165 .126 -.001
20	.5-T .45-3 .70-T	.003 .003 .001	0.000 .000 -.000	0.000 .000 -.000	0.071 .065 -.001	0.035 .030 -.001	0.313 .233 -.001	0.000 -.000 -.000	0.145 .106 -.001	0.000 -.000 -.000	0.145 .106 -.001
25	.5-T .45-3 .70-T	.003 .003 .001	0.000 .000 -.000	0.000 .000 -.000	0.070 .065 -.001	0.035 .030 -.001	0.310 .230 -.001	0.000 -.000 -.000	0.142 .103 -.001	0.000 -.000 -.000	0.142 .103 -.001
30.50	.5-T .45-3 .70-T	.003 .003 .001	0.000 .000 -.000	0.000 .000 -.000	0.066 .061 -.001	0.034 .029 -.001	0.309 .229 -.001	0.000 -.000 -.000	0.131 .092 -.001	0.000 -.000 -.000	0.131 .092 -.001
31.50	.5-T .45-3 .70-T	.003 .003 .001	0.000 .000 -.000	0.000 .000 -.000	0.066 .061 -.001	0.034 .029 -.001	0.306 .226 -.001	0.000 -.000 -.000	0.128 .089 -.001	0.000 -.000 -.000	0.128 .089 -.001
34.50	.5-T .45-3 .70-T	.003 .003 .001	0.000 .000 -.000	0.000 .000 -.000	0.065 .060 -.001	0.033 .028 -.001	0.303 .223 -.001	0.000 -.000 -.000	0.125 .086 -.001	0.000 -.000 -.000	0.125 .086 -.001
36.00	.5-T .45-3 .70-T	.003 .003 .001	0.000 .000 -.000	0.000 .000 -.000	0.064 .059 -.001	0.032 .027 -.001	0.300 .219 -.001	0.000 -.000 -.000	0.123 .084 -.001	0.000 -.000 -.000	0.123 .084 -.001
41.00	.5-T .45-3 .70-T	.003 .003 .001	0.000 .000 -.000	0.000 .000 -.000	0.063 .058 -.001	0.031 .026 -.001	0.297 .216 -.001	0.000 -.000 -.000	0.121 .082 -.001	0.000 -.000 -.000	0.121 .082 -.001
44.50	.5-T .45-3 .70-T	.003 .003 .001	0.000 .000 -.000	0.000 .000 -.000	0.062 .057 -.001	0.030 .025 -.001	0.294 .213 -.001	0.000 -.000 -.000	0.119 .079 -.001	0.000 -.000 -.000	0.119 .079 -.001
47.50	.5-T .45-3 .70-T	.003 .003 .001	0.000 .000 -.000	0.000 .000 -.000	0.061 .056 -.001	0.029 .024 -.001	0.291 .210 -.001	0.000 -.000 -.000	0.117 .077 -.001	0.000 -.000 -.000	0.117 .077 -.001
50.00	.5-T .45-3 .70-T	.003 .003 .001	0.000 .000 -.000	0.000 .000 -.000	0.060 .055 -.001	0.028 .023 -.001	0.288 .207 -.001	0.000 -.000 -.000	0.115 .075 -.001	0.000 -.000 -.000	0.115 .075 -.001
53.50	.5-T .45-3 .70-T	.003 .003 .001	0.000 .000 -.000	0.000 .000 -.000	0.059 .054 -.001	0.027 .022 -.001	0.285 .204 -.001	0.000 -.000 -.000	0.113 .073 -.001	0.000 -.000 -.000	0.113 .073 -.001
56.50	.5-T .45-3 .70-T	.003 .003 .001	0.000 .000 -.000	0.000 .000 -.000	0.058 .053 -.001	0.026 .021 -.001	0.282 .201 -.001	0.000 -.000 -.000	0.111 .071 -.001	0.000 -.000 -.000	0.111 .071 -.001
59.50	.5-T .45-3 .70-T	.003 .003 .001	0.000 .000 -.000	0.000 .000 -.000	0.057 .052 -.001	0.025 .020 -.001	0.279 .198 -.001	0.000 -.000 -.000	0.109 .069 -.001	0.000 -.000 -.000	0.109 .069 -.001
60	.5-T .45-3 .70-T	0	0	0	0	0	0	0	0	0	0



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TABLE II.—CONTINUED

(e) M,0.80.

Sec- tion (in.)	Percent fuselage radius	Angle of attack, degrees														
		-4			0			2			4			6		
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	
10	8.7	.006	.008	.005	.018	.008	.016	.008	.016	.008	.017	.008	.016	.011	.016	
	42.3	.007	.008	.006	.016	.007	.017	.006	.017	.007	.018	.006	.016	.011	.017	
	70.7	.011	.011	.007	.019	.011	.021	.007	.021	.011	.022	.008	.020	.014	.022	
15	8.7	.011	.012	.007	.021	.011	.023	.007	.021	.011	.024	.008	.022	.015	.024	
	42.3	.012	.013	.008	.022	.012	.024	.008	.022	.012	.025	.009	.023	.016	.025	
	70.7	.018	.018	.010	.025	.017	.029	.010	.025	.017	.030	.013	.027	.020	.030	
20	8.7	.016	--	.008	--	.009	--	.011	--	.010	--	.010	--	.014	--	
	42.3	.017	--	.009	--	.008	--	.011	--	.010	--	.010	--	.015	--	
	70.7	.011	--	.007	--	.007	--	.013	--	.012	--	.012	--	.016	--	
25	8.7	.020	--	.008	--	.009	--	.011	--	.011	--	.011	--	.018	--	
	42.3	.021	--	.009	--	.008	--	.012	--	.011	--	.011	--	.021	--	
	70.7	.013	--	.007	--	.007	--	.015	--	.014	--	.014	--	.018	--	
30	8.7	.025	--	.008	--	.009	--	.011	--	.011	--	.011	--	.021	--	
	42.3	.026	--	.009	--	.008	--	.012	--	.011	--	.011	--	.022	--	
	70.7	.015	--	.008	--	.008	--	.016	--	.015	--	.015	--	.020	--	
35	8.7	.030	--	.008	--	.010	--	.012	--	.012	--	.012	--	.025	--	
	42.3	.031	--	.009	--	.010	--	.013	--	.013	--	.013	--	.026	--	
	70.7	.016	--	.008	--	.008	--	.017	--	.016	--	.016	--	.028	--	
40	8.7	.035	--	.008	--	.010	--	.012	--	.012	--	.012	--	.030	--	
	42.3	.037	--	.009	--	.010	--	.013	--	.013	--	.013	--	.031	--	
	70.7	.017	--	.008	--	.008	--	.018	--	.017	--	.017	--	.032	--	
45	8.7	.040	--	.008	--	.010	--	.012	--	.012	--	.012	--	.035	--	
	42.3	.042	--	.009	--	.010	--	.013	--	.013	--	.013	--	.036	--	
	70.7	.018	--	.008	--	.008	--	.019	--	.018	--	.018	--	.038	--	
50	8.7	.045	--	.008	--	.010	--	.012	--	.012	--	.012	--	.040	--	
	42.3	.047	--	.009	--	.010	--	.013	--	.013	--	.013	--	.041	--	
	70.7	.019	--	.008	--	.008	--	.020	--	.019	--	.019	--	.042	--	
55	8.7	.050	--	.008	--	.010	--	.012	--	.012	--	.012	--	.045	--	
	42.3	.052	--	.009	--	.010	--	.013	--	.013	--	.013	--	.046	--	
	70.7	.020	--	.008	--	.008	--	.021	--	.020	--	.020	--	.048	--	
60	8.7	.055	--	.008	--	.010	--	.012	--	.012	--	.012	--	.050	--	
	42.3	.057	--	.009	--	.010	--	.013	--	.013	--	.013	--	.051	--	
	70.7	.021	--	.008	--	.008	--	.022	--	.021	--	.021	--	.052	--	
65	8.7	.060	--	.008	--	.010	--	.012	--	.012	--	.012	--	.055	--	
	42.3	.062	--	.009	--	.010	--	.013	--	.013	--	.013	--	.056	--	
	70.7	.022	--	.008	--	.008	--	.023	--	.022	--	.022	--	.058	--	
70	8.7	.065	--	.008	--	.010	--	.012	--	.012	--	.012	--	.060	--	
	42.3	.067	--	.009	--	.010	--	.013	--	.013	--	.013	--	.061	--	
	70.7	.023	--	.008	--	.008	--	.024	--	.023	--	.023	--	.062	--	
75	8.7	.070	--	.008	--	.010	--	.012	--	.012	--	.012	--	.065	--	
	42.3	.072	--	.009	--	.010	--	.013	--	.013	--	.013	--	.066	--	
	70.7	.024	--	.008	--	.008	--	.025	--	.024	--	.024	--	.068	--	
80	8.7	.075	--	.008	--	.010	--	.012	--	.012	--	.012	--	.070	--	
	42.3	.077	--	.009	--	.010	--	.013	--	.013	--	.013	--	.071	--	
	70.7	.025	--	.008	--	.008	--	.026	--	.025	--	.025	--	.073	--	
85	8.7	.080	--	.008	--	.010	--	.012	--	.012	--	.012	--	.075	--	
	42.3	.082	--	.009	--	.010	--	.013	--	.013	--	.013	--	.076	--	
	70.7	.026	--	.008	--	.008	--	.027	--	.026	--	.026	--	.078	--	
90	8.7	.085	--	.008	--	.010	--	.012	--	.012	--	.012	--	.080	--	
	42.3	.087	--	.009	--	.010	--	.013	--	.013	--	.013	--	.081	--	
	70.7	.027	--	.008	--	.008	--	.028	--	.027	--	.027	--	.083	--	
95	8.7	.090	--	.008	--	.010	--	.012	--	.012	--	.012	--	.085	--	
	42.3	.092	--	.009	--	.010	--	.013	--	.013	--	.013	--	.086	--	
	70.7	.028	--	.008	--	.008	--	.029	--	.028	--	.028	--	.088	--	

(f) M, 0.82.

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TABLE II.—CONTINUED

(g) M, 0.84.

(h) M, 0.86.

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TABLE II.—CONTINUED

(i) M, 0.88.

Station (in.)	Percent leading radius	Angle of attack, degrees											
		-1		-2		0		2		4		6	
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
10	8.7	-0.105	-0.057	-0.048	-0.068	-0.058	-0.058	-0.056	-0.060	-0.058	-0.055	-0.060	-0.058
	42.3	-0.095	-0.041	-0.073	-0.069	-0.069	-0.069	-0.067	-0.070	-0.069	-0.063	-0.069	-0.067
	70.7	-0.096	-0.033	-0.078	-0.068	-0.068	-0.068	-0.067	-0.070	-0.068	-0.063	-0.069	-0.068
15	8.7	-0.055	-0.005	-0.046	-0.006	-0.030	-0.030	-0.030	-0.030	-0.034	-0.034	-0.030	-0.034
	42.3	-0.050	-0.002	-0.048	-0.008	-0.030	-0.030	-0.030	-0.030	-0.035	-0.035	-0.030	-0.035
	70.7	-0.045	-0.001	-0.050	-0.010	-0.035	-0.035	-0.035	-0.035	-0.040	-0.040	-0.035	-0.040
20	8.7	-0.045	-0.001	-0.050	-0.015	-0.035	-0.035	-0.035	-0.035	-0.040	-0.040	-0.035	-0.040
	42.3	-0.040	-0.001	-0.052	-0.015	-0.037	-0.037	-0.037	-0.037	-0.042	-0.042	-0.037	-0.042
	70.7	-0.035	-0.001	-0.055	-0.020	-0.040	-0.040	-0.040	-0.040	-0.045	-0.045	-0.040	-0.045
25	8.7	-0.040	-0.001	-0.055	-0.020	-0.045	-0.045	-0.045	-0.045	-0.050	-0.050	-0.045	-0.050
	42.3	-0.035	-0.001	-0.058	-0.020	-0.048	-0.048	-0.048	-0.048	-0.053	-0.053	-0.048	-0.053
	70.7	-0.030	-0.001	-0.060	-0.020	-0.050	-0.050	-0.050	-0.050	-0.055	-0.055	-0.050	-0.055
30	8.7	-0.035	-0.001	-0.060	-0.020	-0.050	-0.050	-0.050	-0.050	-0.055	-0.055	-0.050	-0.055
	42.3	-0.030	-0.001	-0.062	-0.020	-0.052	-0.052	-0.052	-0.052	-0.057	-0.057	-0.052	-0.057
	70.7	-0.025	-0.001	-0.065	-0.020	-0.055	-0.055	-0.055	-0.055	-0.060	-0.060	-0.055	-0.060
35	8.7	-0.030	-0.001	-0.065	-0.020	-0.055	-0.055	-0.055	-0.055	-0.060	-0.060	-0.055	-0.060
	42.3	-0.025	-0.001	-0.068	-0.020	-0.058	-0.058	-0.058	-0.058	-0.063	-0.063	-0.058	-0.063
	70.7	-0.020	-0.001	-0.070	-0.020	-0.060	-0.060	-0.060	-0.060	-0.065	-0.065	-0.060	-0.065
40	8.7	-0.025	-0.001	-0.070	-0.020	-0.060	-0.060	-0.060	-0.060	-0.065	-0.065	-0.060	-0.065
	42.3	-0.020	-0.001	-0.072	-0.020	-0.062	-0.062	-0.062	-0.062	-0.067	-0.067	-0.062	-0.067
	70.7	-0.015	-0.001	-0.075	-0.020	-0.065	-0.065	-0.065	-0.065	-0.070	-0.070	-0.065	-0.070
45	8.7	-0.020	-0.001	-0.075	-0.020	-0.065	-0.065	-0.065	-0.065	-0.070	-0.070	-0.065	-0.070
	42.3	-0.015	-0.001	-0.078	-0.020	-0.068	-0.068	-0.068	-0.068	-0.073	-0.073	-0.068	-0.073
	70.7	-0.010	-0.001	-0.080	-0.020	-0.070	-0.070	-0.070	-0.070	-0.075	-0.075	-0.070	-0.075
50	8.7	-0.015	-0.001	-0.080	-0.020	-0.070	-0.070	-0.070	-0.070	-0.075	-0.075	-0.070	-0.075
	42.3	-0.010	-0.001	-0.082	-0.020	-0.072	-0.072	-0.072	-0.072	-0.077	-0.077	-0.072	-0.077
	70.7	-0.005	-0.001	-0.085	-0.020	-0.075	-0.075	-0.075	-0.075	-0.080	-0.080	-0.075	-0.080
55	8.7	-0.010	-0.001	-0.085	-0.020	-0.075	-0.075	-0.075	-0.075	-0.080	-0.080	-0.075	-0.080
	42.3	-0.005	-0.001	-0.088	-0.020	-0.078	-0.078	-0.078	-0.078	-0.083	-0.083	-0.078	-0.083
	70.7	-0.001	-0.001	-0.090	-0.020	-0.080	-0.080	-0.080	-0.080	-0.085	-0.085	-0.080	-0.085
60	8.7	-0.005	-0.001	-0.090	-0.020	-0.080	-0.080	-0.080	-0.080	-0.085	-0.085	-0.080	-0.085
	42.3	-0.001	-0.001	-0.092	-0.020	-0.082	-0.082	-0.082	-0.082	-0.087	-0.087	-0.082	-0.087
	70.7	-0.001	-0.001	-0.095	-0.020	-0.085	-0.085	-0.085	-0.085	-0.090	-0.090	-0.085	-0.090
65	8.7	-0.001	-0.001	-0.095	-0.020	-0.085	-0.085	-0.085	-0.085	-0.090	-0.090	-0.085	-0.090
	42.3	-0.001	-0.001	-0.098	-0.020	-0.088	-0.088	-0.088	-0.088	-0.093	-0.093	-0.088	-0.093
	70.7	-0.001	-0.001	-0.100	-0.020	-0.090	-0.090	-0.090	-0.090	-0.095	-0.095	-0.090	-0.095
70	8.7	-0.001	-0.001	-0.100	-0.020	-0.090	-0.090	-0.090	-0.090	-0.095	-0.095	-0.090	-0.095
	42.3	-0.001	-0.001	-0.102	-0.020	-0.092	-0.092	-0.092	-0.092	-0.097	-0.097	-0.092	-0.097
	70.7	-0.001	-0.001	-0.105	-0.020	-0.095	-0.095	-0.095	-0.095	-0.100	-0.100	-0.095	-0.100
75	8.7	-0.001	-0.001	-0.105	-0.020	-0.095	-0.095	-0.095	-0.095	-0.100	-0.100	-0.095	-0.100
	42.3	-0.001	-0.001	-0.108	-0.020	-0.098	-0.098	-0.098	-0.098	-0.103	-0.103	-0.098	-0.103
	70.7	-0.001	-0.001	-0.110	-0.020	-0.100	-0.100	-0.100	-0.100	-0.105	-0.105	-0.100	-0.105
80	8.7	0	-0.005	-0.005	-0.115	-0.025	-0.105	-0.105	-0.105	-0.105	-0.115	0	-0.005
	42.3	-0.005	-0.005	-0.118	-0.025	-0.108	-0.108	-0.108	-0.108	-0.118	-0.118	-0.005	-0.118
	70.7	-0.005	-0.005	-0.120	-0.025	-0.110	-0.110	-0.110	-0.110	-0.120	-0.120	-0.005	-0.120
85	8.7	0	-0.005	-0.005	-0.120	-0.025	-0.110	-0.110	-0.110	-0.110	-0.120	0	-0.005
	42.3	-0.005	-0.005	-0.122	-0.025	-0.112	-0.112	-0.112	-0.112	-0.122	-0.122	-0.005	-0.122
	70.7	-0.005	-0.005	-0.125	-0.025	-0.115	-0.115	-0.115	-0.115	-0.125	-0.125	-0.005	-0.125

(j) M, 0.90.

Sta- tion (in.)	Percent fuel/oil radius	Angle of attack, degrees											
		-1		-6		0		2		4		6	
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
10	8.7	0.000	0.010	0.000	0.000	0.071	0.071	0.066	0.063	0.041	0.120	0.080	0.138
	N8.3	-0.001	-0.001	-0.000	-0.000	-0.043	-0.043	-0.047	-0.047	-0.020	-0.090	-0.050	-0.123
	70.7	0.070	-0.010	-0.078	-0.000	-0.043	-0.043	-0.047	-0.047	-0.023	-0.090	-0.050	-0.123
15	8.7	-0.030	-0.017	0.011	0.008	0.089	0.12	0.050	0.054	-0.014	0.072	-0.001	0.065
	N8.3	-0.040	-0.021	0.041	0.018	0.115	0.15	0.051	0.056	-0.013	0.073	-0.001	0.070
	70.7	0.039	-0.014	0.018	0.017	0.115	0.15	0.053	0.056	-0.014	0.070	-0.001	0.065
20	8.7	0.016	-0.036	-0.007	-0.000	-0.009	0	-0.009	-0.009	-0.018	-0.080	-0.001	-0.005
	N8.3	-0.001	-0.036	-0.007	-0.000	-0.008	0	-0.009	-0.009	-0.018	-0.080	-0.001	-0.005
	70.7	-0.003	-0.031	-0.001	-0.009	-0.008	0	-0.009	-0.009	-0.018	-0.080	-0.001	-0.005
25	8.7	-0.009	-0.038	-0.009	-0.000	-0.011	-0.011	-0.018	-0.011	-0.019	-0.084	-0.001	-0.005
	N8.3	-0.001	-0.039	-0.008	-0.000	-0.010	-0.010	-0.017	-0.005	-0.017	-0.085	-0.001	-0.005
	70.7	-0.005	-0.037	-0.009	-0.000	-0.005	-0.015	-0.018	-0.005	-0.018	-0.080	-0.001	-0.005
30	8.7	0.011	-0.085	0.005	-0.006	-0.005	-0.010	-0.005	-0.016	-0.005	-0.089	0.010	-0.009
	N8.3	-0.003	-0.086	0.005	-0.006	-0.006	-0.010	-0.007	-0.016	-0.011	-0.087	0.010	-0.007
	70.7	-0.002	-0.083	0.005	-0.006	-0.005	-0.010	-0.005	-0.016	-0.011	-0.087	0.010	-0.005
35	8.7	-0.011	-0.080	0.010	-0.012	-0.011	-0.011	-0.005	-0.004	-0.011	-0.085	0.010	-0.005
	N8.3	-0.011	-0.080	0.011	-0.012	-0.011	-0.011	-0.005	-0.004	-0.011	-0.085	0.010	-0.005
	70.7	-0.001	-0.080	0.009	-0.010	-0.009	-0.011	-0.005	-0.004	-0.011	-0.085	0.010	-0.005
40	8.7	-0.034	-0.101	-0.056	-0.016	0.039	0.054	0.047	0.047	0.045	-0.008	0	-0.011
	N8.3	-0.039	-0.101	-0.056	-0.016	0.040	0.055	0.048	0.047	0.046	-0.008	0	-0.011
	70.7	-0.036	-0.101	-0.053	-0.017	0.039	0.054	0.047	0.047	0.046	-0.008	0	-0.011
45	8.7	-0.068	-0.101	-0.056	-0.016	-0.008	-0.008	-0.005	-0.004	-0.004	-0.009	-0.009	-0.005
	N8.3	-0.077	-0.101	-0.056	-0.016	-0.008	-0.008	-0.005	-0.004	-0.004	-0.009	-0.009	-0.005
	70.7	-0.070	-0.101	-0.053	-0.017	-0.008	-0.008	-0.005	-0.004	-0.004	-0.009	-0.009	-0.005
50	8.7	-0.044	-0.138	0.063	-0.065	-0.010	-0.067	-0.009	-0.007	-0.011	-0.158	0.011	-0.160
	N8.3	-0.050	-0.139	0.063	-0.067	-0.010	-0.067	-0.009	-0.007	-0.011	-0.158	0.011	-0.161
	70.7	-0.051	-0.137	0.063	-0.068	-0.010	-0.067	-0.009	-0.007	-0.011	-0.158	0.011	-0.161
55	8.7	-0.039	-0.180	-0.111	-0.111	-0.018	-0.023	-0.071	-0.088	-0.113	-0.300	-0.190	-0.289
	N8.3	-0.049	-0.180	-0.111	-0.111	-0.018	-0.023	-0.071	-0.088	-0.113	-0.300	-0.190	-0.289
	70.7	-0.042	-0.180	-0.111	-0.111	-0.017	-0.023	-0.070	-0.089	-0.113	-0.301	-0.190	-0.287
60	8.7	-0.019	-0.230	-0.100	-0.127	-0.014	-0.109	-0.130	-0.135	-0.108	-0.371	0	-0.325
	N8.3	-0.034	-0.230	-0.103	-0.129	-0.015	-0.108	-0.130	-0.135	-0.107	-0.371	0	-0.325
	70.7	-0.031	-0.230	-0.107	-0.127	-0.017	-0.107	-0.130	-0.135	-0.107	-0.371	0	-0.325
65	8.7	-0.034	-0.268	-0.068	-0.077	-0.027	-0.127	-0.144	-0.144	-0.144	-0.347	0	-0.340
	N8.3	-0.039	-0.268	-0.068	-0.077	-0.027	-0.127	-0.144	-0.144	-0.144	-0.347	0	-0.340
	70.7	-0.037	-0.268	-0.068	-0.077	-0.027	-0.127	-0.144	-0.144	-0.144	-0.347	0	-0.340
70	8.7	-0.030	-0.300	-0.065	-0.063	-0.017	-0.145	-0.154	-0.154	-0.154	-0.305	0	-0.308
	N8.3	-0.031	-0.300	-0.065	-0.063	-0.017	-0.145	-0.154	-0.154	-0.154	-0.305	0	-0.308
	70.7	-0.030	-0.300	-0.065	-0.063	-0.017	-0.145	-0.154	-0.154	-0.154	-0.305	0	-0.308
75	8.7	0	-0.350	-0.055	-0.055	-0.009	-0.165	-0.165	0	-0.165	-0.247	0.009	-0.247
	N8.3	-0.008	-0.350	-0.055	-0.055	-0.009	-0.165	-0.165	0	-0.165	-0.247	0.009	-0.247
	70.7	-0.007	-0.350	-0.055	-0.055	-0.009	-0.165	-0.165	0	-0.165	-0.247	0.009	-0.247
80	8.7	-0.030	-0.350	-0.065	-0.065	-0.017	-0.165	-0.154	-0.154	-0.154	-0.247	0	-0.250
	N8.3	-0.031	-0.350	-0.065	-0.065	-0.017	-0.165	-0.154	-0.154	-0.154	-0.247	0	-0.250
	70.7	-0.030	-0.350	-0.065	-0.065	-0.017	-0.165	-0.154	-0.154	-0.154	-0.247	0	-0.250
85	8.7	-0.030	-0.350	-0.065	-0.065	-0.017	-0.165	-0.154	-0.154	-0.154	-0.247	0	-0.250
	N8.3	-0.031	-0.350	-0.065	-0.065	-0.017	-0.165	-0.154	-0.154	-0.154	-0.247	0	-0.250
	70.7	-0.030	-0.350	-0.065	-0.065	-0.017	-0.165	-0.154	-0.154	-0.154	-0.247	0	-0.250

~~CONFIDENTIAL~~

TABLE II.— CONCLUDED

(k) M, O-92.

(1) M, 0.94.



~~CONFIDENTIAL~~

TABLE III.—PRESSURE COEFFICIENTS ON A FUSELAGE IN COMBINATION WITH
A WING HAVING A SWEEPBACK ANGLE OF 35° AND AN ASPECT RATIO OF 6.

(a) M, 0.40.

Station (in.)	Percent change readings	Angle of attack, degrees									
		8		10		12		14		16	
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
10	8.7 45.3 70.7	-0.019 -0.019 -0.019	0.136 -0.093 -0.070	-0.006 -0.083 -0.058	0.133 -0.133 -0.050	-0.039 -0.039 -0.021	0.108 -0.108 -0.061	-0.019 -0.198 -0.103	0.216 -0.061 -0.058	-0.003 -0.001 -0.001	0.073 -0.030 -0.020
15	8.7 45.3 70.7	-0.210 -0.067 -0.067	-0.058 -0.058 -0.058	-0.167 -0.167 -0.167	-0.029 -0.029 -0.029	-0.029 -0.029 -0.029	-0.035 -0.035 -0.035	-0.174 -0.174 -0.174	-0.026 -0.026 -0.026	-0.026 -0.026 -0.026	0.115 -0.115 -0.115
20	8.7 45.3 70.7	-0.039 -0.039 -0.039	0.061 -0.069 -0.069	-0.051 -0.051 -0.051	0.083 -0.083 -0.083	-0.049 -0.049 -0.049	0.058 -0.058 -0.058	-0.058 -0.058 -0.058	0.129 -0.083 -0.083	-0.005 -0.005 -0.005	0.073 -0.023 -0.023
25	8.7 45.3 70.7	-0.046 -0.046 -0.046	0.051 -0.058 -0.058	-0.046 -0.051 -0.051	0.065 -0.071 -0.071	-0.046 -0.052 -0.052	0.060 -0.065 -0.065	-0.049 -0.057 -0.057	0.186 -0.177 -0.175	-0.008 -0.009 -0.009	0.101 -0.064 -0.064
30-35	8.7 45.3 70.7	-0.058 -0.058 -0.058	0.041 -0.043 -0.043	-0.071 -0.068 -0.068	0.051 -0.050 -0.050	-0.045 -0.045 -0.045	0.032 -0.032 -0.032	-0.058 -0.058 -0.058	0.139 -0.139 -0.139	-0.029 -0.029 -0.029	0.113 -0.078 -0.078
31-35	8.7 45.3 70.7	-0.074 -0.074 -0.074	0.049 -0.049 -0.049	-0.097 -0.097 -0.097	0.059 -0.059 -0.059	-0.049 -0.049 -0.049	0.036 -0.036 -0.036	-0.069 -0.069 -0.069	0.109 -0.074 -0.074	-0.021 -0.021 -0.021	0.126 -0.089 -0.089
35-40	8.7 45.3 70.7	-0.094 -0.093 -0.093	0.077 -0.061 -0.061	-0.115 -0.125 -0.125	0.111 -0.081 -0.081	-0.126 -0.126 -0.126	0.114 -0.097 -0.097	-0.173 -0.177 -0.177	0.188 -0.165 -0.165	-0.035 -0.035 -0.035	0.135 -0.118 -0.118
40-45	8.7 45.3 70.7	-0.128 -0.128 -0.128	0.119 -0.104 -0.104	-0.167 -0.155 -0.155	0.125 -0.105 -0.105	-0.155 -0.155 -0.155	0.168 -0.145 -0.145	-0.244 -0.244 -0.244	0.223 -0.193 -0.193	-0.044 -0.044 -0.044	0.176 -0.152 -0.152
45-50	8.7 45.3 70.7	-0.159 -0.159 -0.159	0.149 -0.135 -0.135	-0.178 -0.165 -0.165	0.138 -0.115 -0.115	-0.174 -0.155 -0.155	0.194 -0.166 -0.166	-0.303 -0.273 -0.273	0.283 -0.247 -0.247	-0.047 -0.047 -0.047	0.196 -0.168 -0.168
50-55	8.7 45.3 70.7	-0.189 -0.189 -0.189	0.179 -0.164 -0.164	-0.208 -0.191 -0.191	0.189 -0.168 -0.168	-0.188 -0.168 -0.168	0.194 -0.165 -0.165	-0.353 -0.313 -0.313	0.303 -0.273 -0.273	-0.053 -0.053 -0.053	0.216 -0.187 -0.187
55-60	8.7 45.3 70.7	-0.219 -0.219 -0.219	0.209 -0.195 -0.195	-0.238 -0.221 -0.221	0.219 -0.194 -0.194	-0.234 -0.215 -0.215	0.204 -0.186 -0.186	-0.393 -0.353 -0.353	0.323 -0.293 -0.293	-0.063 -0.063 -0.063	0.235 -0.205 -0.205
60-65	8.7 45.3 70.7	-0.249 -0.249 -0.249	0.239 -0.224 -0.224	-0.268 -0.251 -0.251	0.239 -0.215 -0.215	-0.264 -0.245 -0.245	0.219 -0.199 -0.199	-0.423 -0.383 -0.383	0.343 -0.313 -0.313	-0.073 -0.073 -0.073	0.254 -0.224 -0.224
65-70	8.7 45.3 70.7	-0.279 -0.279 -0.279	0.269 -0.254 -0.254	-0.298 -0.281 -0.281	0.269 -0.245 -0.245	-0.284 -0.265 -0.265	0.214 -0.194 -0.194	-0.453 -0.413 -0.413	0.363 -0.333 -0.333	-0.083 -0.083 -0.083	0.273 -0.243 -0.243
70-75	8.7 45.3 70.7	-0.309 -0.309 -0.309	0.299 -0.284 -0.284	-0.328 -0.311 -0.311	0.299 -0.275 -0.275	-0.304 -0.285 -0.285	0.209 -0.189 -0.189	-0.483 -0.443 -0.443	0.383 -0.353 -0.353	-0.093 -0.093 -0.093	0.292 -0.262 -0.262
75-80	8.7 45.3 70.7	-0.339 -0.339 -0.339	0.329 -0.314 -0.314	-0.358 -0.341 -0.341	0.329 -0.305 -0.305	-0.344 -0.325 -0.325	0.204 -0.184 -0.184	-0.513 -0.473 -0.473	0.403 -0.373 -0.373	-0.103 -0.103 -0.103	0.311 -0.281 -0.281
80-85	8.7 45.3 70.7	-0.369 -0.369 -0.369	0.359 -0.344 -0.344	-0.388 -0.371 -0.371	0.359 -0.335 -0.335	-0.364 -0.345 -0.345	0.209 -0.189 -0.189	-0.543 -0.503 -0.503	0.423 -0.393 -0.393	-0.113 -0.113 -0.113	0.330 -0.300 -0.300
85-90	8.7 45.3 70.7	-0.400 -0.399 -0.399	0.389 -0.374 -0.374	-0.419 -0.402 -0.402	0.389 -0.365 -0.365	-0.384 -0.365 -0.365	0.214 -0.194 -0.194	-0.573 -0.533 -0.533	0.443 -0.413 -0.413	-0.123 -0.123 -0.123	0.349 -0.319 -0.319
90-95	8.7 45.3 70.7	-0.430 -0.429 -0.429	0.419 -0.404 -0.404	-0.469 -0.452 -0.452	0.419 -0.395 -0.395	-0.424 -0.405 -0.405	0.219 -0.199 -0.199	-0.603 -0.563 -0.563	0.463 -0.433 -0.433	-0.133 -0.133 -0.133	0.368 -0.338 -0.338



TABLE III.—CONTINUED

(b) M, 0.60.

Altitude (in.)	Percent over- speed	Angle of attack, degrees											
		8		10		12		14		16		18	
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
10	8.7	-0.018	0.135	-0.003	0.168	-0.008	0.180	-0.030	0.178	-0.040	0.164	-0.031	0.156
	42.3	-0.018	0.135	-0.003	0.168	-0.008	0.180	-0.030	0.178	-0.040	0.166	-0.038	0.156
	70.7	-0.018	0.135	-0.003	0.168	-0.008	0.180	-0.030	0.178	-0.040	0.166	-0.038	0.156
15	8.7	-0.025	0.135	-0.015	0.165	-0.022	0.175	-0.037	0.171	-0.051	0.165	-0.045	0.155
	42.3	-0.025	0.135	-0.015	0.165	-0.022	0.175	-0.037	0.171	-0.051	0.165	-0.045	0.155
	70.7	-0.025	0.135	-0.015	0.165	-0.022	0.175	-0.037	0.171	-0.051	0.165	-0.045	0.155
20	8.7	-0.030	0.135	-0.020	0.163	-0.035	0.173	-0.050	0.168	-0.060	0.160	-0.054	0.152
	42.3	-0.030	0.135	-0.020	0.163	-0.035	0.173	-0.050	0.168	-0.060	0.160	-0.054	0.152
	70.7	-0.030	0.135	-0.020	0.163	-0.035	0.173	-0.050	0.168	-0.060	0.160	-0.054	0.152
25	8.7	-0.035	0.135	-0.025	0.161	-0.040	0.171	-0.055	0.166	-0.065	0.158	-0.059	0.150
	42.3	-0.035	0.135	-0.025	0.161	-0.040	0.171	-0.055	0.166	-0.065	0.158	-0.059	0.150
	70.7	-0.035	0.135	-0.025	0.161	-0.040	0.171	-0.055	0.166	-0.065	0.158	-0.059	0.150
30	8.7	-0.040	0.135	-0.030	0.159	-0.045	0.169	-0.060	0.161	-0.070	0.152	-0.064	0.144
	42.3	-0.040	0.135	-0.030	0.159	-0.045	0.169	-0.060	0.161	-0.070	0.152	-0.064	0.144
	70.7	-0.040	0.135	-0.030	0.159	-0.045	0.169	-0.060	0.161	-0.070	0.152	-0.064	0.144
35	8.7	-0.045	0.135	-0.035	0.157	-0.050	0.167	-0.065	0.159	-0.075	0.150	-0.069	0.142
	42.3	-0.045	0.135	-0.035	0.157	-0.050	0.167	-0.065	0.159	-0.075	0.150	-0.069	0.142
	70.7	-0.045	0.135	-0.035	0.157	-0.050	0.167	-0.065	0.159	-0.075	0.150	-0.069	0.142
40	8.7	-0.050	0.135	-0.040	0.155	-0.055	0.165	-0.070	0.155	-0.080	0.146	-0.074	0.138
	42.3	-0.050	0.135	-0.040	0.155	-0.055	0.165	-0.070	0.155	-0.080	0.146	-0.074	0.138
	70.7	-0.050	0.135	-0.040	0.155	-0.055	0.165	-0.070	0.155	-0.080	0.146	-0.074	0.138
45	8.7	-0.055	0.135	-0.045	0.153	-0.060	0.163	-0.075	0.153	-0.085	0.141	-0.078	0.133
	42.3	-0.055	0.135	-0.045	0.153	-0.060	0.163	-0.075	0.153	-0.085	0.141	-0.078	0.133
	70.7	-0.055	0.135	-0.045	0.153	-0.060	0.163	-0.075	0.153	-0.085	0.141	-0.078	0.133
50	8.7	-0.060	0.135	-0.050	0.151	-0.065	0.161	-0.080	0.151	-0.090	0.139	-0.083	0.131
	42.3	-0.060	0.135	-0.050	0.151	-0.065	0.161	-0.080	0.151	-0.090	0.139	-0.083	0.131
	70.7	-0.060	0.135	-0.050	0.151	-0.065	0.161	-0.080	0.151	-0.090	0.139	-0.083	0.131
55	8.7	-0.065	0.135	-0.055	0.149	-0.070	0.159	-0.085	0.151	-0.095	0.137	-0.088	0.129
	42.3	-0.065	0.135	-0.055	0.149	-0.070	0.159	-0.085	0.151	-0.095	0.137	-0.088	0.129
	70.7	-0.065	0.135	-0.055	0.149	-0.070	0.159	-0.085	0.151	-0.095	0.137	-0.088	0.129
60	8.7	-0.070	0.135	-0.060	0.147	-0.075	0.157	-0.090	0.151	-0.100	0.133	-0.093	0.125
	42.3	-0.070	0.135	-0.060	0.147	-0.075	0.157	-0.090	0.151	-0.100	0.133	-0.093	0.125
	70.7	-0.070	0.135	-0.060	0.147	-0.075	0.157	-0.090	0.151	-0.100	0.133	-0.093	0.125
65	8.7	-0.075	0.135	-0.065	0.145	-0.080	0.155	-0.095	0.151	-0.105	0.131	-0.098	0.121
	42.3	-0.075	0.135	-0.065	0.145	-0.080	0.155	-0.095	0.151	-0.105	0.131	-0.098	0.121
	70.7	-0.075	0.135	-0.065	0.145	-0.080	0.155	-0.095	0.151	-0.105	0.131	-0.098	0.121
70	8.7	-0.080	0.135	-0.070	0.143	-0.085	0.153	-0.100	0.151	-0.110	0.126	-0.103	0.117
	42.3	-0.080	0.135	-0.070	0.143	-0.085	0.153	-0.100	0.151	-0.110	0.126	-0.103	0.117
	70.7	-0.080	0.135	-0.070	0.143	-0.085	0.153	-0.100	0.151	-0.110	0.126	-0.103	0.117
75	8.7	-0.085	0.135	-0.075	0.141	-0.090	0.151	-0.105	0.151	-0.115	0.121	-0.108	0.113
	42.3	-0.085	0.135	-0.075	0.141	-0.090	0.151	-0.105	0.151	-0.115	0.121	-0.108	0.113
	70.7	-0.085	0.135	-0.075	0.141	-0.090	0.151	-0.105	0.151	-0.115	0.121	-0.108	0.113
80	8.7	-0.090	0.135	-0.080	0.139	-0.095	0.149	-0.110	0.151	-0.120	0.116	-0.114	0.108
	42.3	-0.090	0.135	-0.080	0.139	-0.095	0.149	-0.110	0.151	-0.120	0.116	-0.114	0.108
	70.7	-0.090	0.135	-0.080	0.139	-0.095	0.149	-0.110	0.151	-0.120	0.116	-0.114	0.108
85	8.7	-0.095	0.135	-0.085	0.137	-0.100	0.147	-0.115	0.151	-0.125	0.111	-0.122	0.103
	42.3	-0.095	0.135	-0.085	0.137	-0.100	0.147	-0.115	0.151	-0.125	0.111	-0.122	0.103
	70.7	-0.095	0.135	-0.085	0.137	-0.100	0.147	-0.115	0.151	-0.125	0.111	-0.122	0.103
90	8.7	-0.100	0.135	-0.090	0.135	-0.105	0.145	-0.120	0.151	-0.130	0.106	-0.134	0.095
	42.3	-0.100	0.135	-0.090	0.135	-0.105	0.145	-0.120	0.151	-0.130	0.106	-0.134	0.095
	70.7	-0.100	0.135	-0.090	0.135	-0.105	0.145	-0.120	0.151	-0.130	0.106	-0.134	0.095
95	8.7	-0.105	0.135	-0.095	0.133	-0.110	0.143	-0.125	0.151	-0.135	0.101	-0.140	0.090
	42.3	-0.105	0.135	-0.095	0.133	-0.110	0.143	-0.125	0.151	-0.135	0.101	-0.140	0.090
	70.7	-0.105	0.135	-0.095	0.133	-0.110	0.143	-0.125	0.151	-0.135	0.101	-0.140	0.090



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TABLE III.—CONTINUED

(c) M, 0.70.

Station (in.)	Percent fuselage radius	Angle of attack, degrees									
		-4		0		8		16		32	
10	8.7	.009	.012	.006	.010	.016	.015	.019	.022	.021	.020
	42.3	.009	.012	.006	.010	.016	.015	.019	.022	.021	.020
	70.7	.008	.012	.006	.010	.016	.015	.019	.021	.021	.020
15	8.7	.004	- .018	.006	- .008	.017	.008	- .005	.019	- .018	.015
	42.3	.004	- .018	.006	- .008	.017	.008	- .005	.019	- .018	.015
	70.7	.003	- .018	.006	- .008	.017	.008	- .005	.019	- .018	.015
20	8.7	.004	- .018	.006	- .008	.017	.008	- .005	.019	- .018	.015
	42.3	.003	- .018	.006	- .008	.017	.008	- .005	.019	- .018	.015
	70.7	.003	- .018	.006	- .008	.017	.008	- .005	.019	- .018	.015
25	8.7	.003	- .018	.006	- .008	.017	.008	- .005	.019	- .018	.015
	42.3	.003	- .018	.006	- .008	.017	.008	- .005	.019	- .018	.015
	70.7	.003	- .018	.006	- .008	.017	.008	- .005	.019	- .018	.015
30.50	8.7	.003	- .018	.006	- .008	.017	.008	- .005	.019	- .018	.015
	42.3	.003	- .018	.006	- .008	.017	.008	- .005	.019	- .018	.015
	70.7	.003	- .018	.006	- .008	.017	.008	- .005	.019	- .018	.015
35.00	8.7	.003	- .018	.006	- .008	.017	.008	- .005	.019	- .018	.015
	42.3	.003	- .018	.006	- .008	.017	.008	- .005	.019	- .018	.015
	70.7	.003	- .018	.006	- .008	.017	.008	- .005	.019	- .018	.015
40.50	8.7	.003	- .018	.006	- .008	.017	.008	- .005	.019	- .018	.015
	42.3	.003	- .018	.006	- .008	.017	.008	- .005	.019	- .018	.015
	70.7	.003	- .018	.006	- .008	.017	.008	- .005	.019	- .018	.015
45.00	8.7	.003	- .018	.006	- .008	.017	.008	- .005	.019	- .018	.015
	42.3	.003	- .018	.006	- .008	.017	.008	- .005	.019	- .018	.015
	70.7	.003	- .018	.006	- .008	.017	.008	- .005	.019	- .018	.015
47.50	8.7	.003	- .018	.006	- .008	.017	.008	- .005	.019	- .018	.015
	42.3	.003	- .018	.006	- .008	.017	.008	- .005	.019	- .018	.015
	70.7	.003	- .018	.006	- .008	.017	.008	- .005	.019	- .018	.015
50.50	8.7	.003	- .018	.006	- .008	.017	.008	- .005	.019	- .018	.015
	42.3	.003	- .018	.006	- .008	.017	.008	- .005	.019	- .018	.015
	70.7	.003	- .018	.006	- .008	.017	.008	- .005	.019	- .018	.015
53.50	8.7	--	- .021	.006	- .018	.013	- .005	.017	- .018	.015	.014
	42.3	- .021	- .021	.006	- .018	.013	- .005	.017	- .018	.015	.014
	70.7	- .021	- .021	.006	- .018	.013	- .005	.017	- .018	.015	.014
56.50	8.7	- .021	- .021	.006	- .018	.013	- .005	.017	- .018	.015	.014
	42.3	- .021	- .021	.006	- .018	.013	- .005	.017	- .018	.015	.014
	70.7	- .021	- .021	.006	- .018	.013	- .005	.017	- .018	.015	.014
59.50	8.7	- .021	- .021	.006	- .018	.013	- .005	.017	- .018	.015	.014
	42.3	- .021	- .021	.006	- .018	.013	- .005	.017	- .018	.015	.014
	70.7	- .021	- .021	.006	- .018	.013	- .005	.017	- .018	.015	.014
Sta- tions (in.)	Percent fuselage radius	Angle of attack, degrees									
		6		8		10		16		32	
10	8.7	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface

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TABLE III.— CONTINUED

(d) M, 0.75.

Elevation (in.)	Percent Leading radius	Angle of attack, degrees									
		6		8		10		12		14	
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
10	.7	.7	.605	.607	.607	.607	.605	.605	.605	.605	.605
	.45	.44	.408	.408	.407	.407	.405	.405	.405	.405	.405
	.30	.30	.268	.268	.267	.267	.265	.265	.265	.265	.265
15	.7	.625	.618	.610	.603	.603	.603	.603	.603	.603	.603
	.45	.427	.408	.407	.405	.405	.403	.403	.403	.403	.403
	.30	.303	.288	.287	.285	.285	.283	.283	.283	.283	.283
20	.7	.628	.625	.620	.614	.614	.614	.614	.614	.614	.614
	.45	.428	.424	.420	.415	.415	.414	.414	.414	.414	.414
	.30	.308	.304	.300	.298	.298	.297	.297	.297	.297	.297
25.50	.7	.611	.603	.601	.595	.595	.595	.595	.595	.595	.595
	.45	.424	.416	.413	.408	.408	.407	.407	.407	.407	.407
	.30	.304	.297	.295	.293	.293	.292	.292	.292	.292	.292
31.50	.7	.603	.597	.591	.584	.584	.584	.584	.584	.584	.584
	.45	.417	.411	.407	.401	.401	.399	.399	.399	.399	.399
	.30	.307	.301	.299	.297	.297	.296	.296	.296	.296	.296
34.50	.7	.617	.607	.601	.595	.595	.595	.595	.595	.595	.595
	.45	.427	.417	.413	.408	.408	.407	.407	.407	.407	.407
	.30	.303	.297	.295	.293	.293	.292	.292	.292	.292	.292
35.00	.7	.605	.597	.593	.585	.585	.585	.585	.585	.585	.585
	.45	.427	.418	.414	.408	.408	.407	.407	.407	.407	.407
	.30	.304	.298	.295	.293	.293	.292	.292	.292	.292	.292
41.50	.7	.607	.599	.593	.587	.587	.587	.587	.587	.587	.587
	.45	.427	.419	.415	.409	.409	.408	.408	.408	.408	.408
	.30	.303	.298	.295	.293	.293	.292	.292	.292	.292	.292
44.50	.7	.619	.611	.605	.598	.598	.598	.598	.598	.598	.598
	.45	.431	.422	.418	.412	.412	.411	.411	.411	.411	.411
	.30	.305	.299	.296	.294	.294	.293	.293	.293	.293	.293
47.50	.7	.621	.613	.607	.600	.600	.600	.600	.600	.600	.600
	.45	.433	.424	.419	.413	.413	.412	.412	.412	.412	.412
	.30	.307	.299	.296	.294	.294	.293	.293	.293	.293	.293
50.50	.7	.623	.615	.609	.602	.602	.602	.602	.602	.602	.602
	.45	.435	.426	.421	.415	.415	.414	.414	.414	.414	.414
	.30	.308	.299	.296	.294	.294	.293	.293	.293	.293	.293
53.50	.7	—	—	—	—	—	—	—	—	—	—
	.45	—	—	—	—	—	—	—	—	—	—
	.30	—	—	—	—	—	—	—	—	—	—
54.50	.7	.625	.617	.611	.604	.604	.604	.604	.604	.604	.604
	.45	.437	.428	.423	.417	.417	.416	.416	.416	.416	.416
	.30	.309	.300	.297	.295	.295	.294	.294	.294	.294	.294
59.50	.7	.627	.619	.613	.606	.606	.606	.606	.606	.606	.606
	.45	.439	.430	.425	.419	.419	.418	.418	.418	.418	.418
	.30	.311	.302	.299	.297	.297	.296	.296	.296	.296	.296

Elevation (in.)	Percent Leading radius	Angle of attack, degrees									
		6		8		10		12		14	
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
10	.7	.625	.617	.610	.603	.603	.603	.603	.603	.603	.603
	.45	.435	.427	.420	.413	.413	.412	.412	.412	.412	.412
	.30	.313	.304	.297	.290	.290	.289	.289	.289	.289	.289
15	.7	.628	.620	.612	.605	.605	.605	.605	.605	.605	.605
	.45	.438	.430	.423	.416	.416	.415	.415	.415	.415	.415
	.30	.314	.305	.298	.291	.291	.290	.290	.290	.290	.290
20	.7	.630	.622	.614	.607	.607	.607	.607	.607	.607	.607
	.45	.440	.432	.425	.418	.418	.417	.417	.417	.417	.417
	.30	.315	.306	.299	.292	.292	.291	.291	.291	.291	.291
25.50	.7	.633	.625	.617	.610	.610	.610	.610	.610	.610	.610
	.45	.443	.435	.428	.421	.421	.420	.420	.420	.420	.420
	.30	.316	.307	.300	.293	.293	.292	.292	.292	.292	.292
31.50	.7	.635	.627	.619	.612	.612	.612	.612	.612	.612	.612
	.45	.445	.437	.430	.423	.423	.422	.422	.422	.422	.422
	.30	.317	.308	.301	.294	.294	.293	.293	.293	.293	.293
34.50	.7	.637	.629	.621	.614	.614	.614	.614	.614	.614	.614
	.45	.447	.439	.432	.425	.425	.424	.424	.424	.424	.424
	.30	.318	.309	.302	.295	.295	.294	.294	.294	.294	.294
35.00	.7	.639	.631	.623	.616	.616	.616	.616	.616	.616	.616
	.45	.449	.441	.434	.427	.427	.426	.426	.426	.426	.426
	.30	.319	.310	.303	.296	.296	.295	.295	.295	.295	.295
41.50	.7	.641	.633	.625	.618	.618	.618	.618	.618	.618	.618
	.45	.451	.443	.436	.429	.429	.428	.428	.428	.428	.428
	.30	.320	.311	.304	.297	.297	.296	.296	.296	.296	.296
44.50	.7	.643	.635	.627	.620	.620	.620	.620	.620	.620	.620
	.45	.453	.445	.438	.431	.431	.430	.430	.430	.430	.430
	.30	.321	.312	.305	.298	.298	.297	.297	.297	.297	.297
50.50	.7	.645	.637	.629	.622	.622	.622	.622	.622	.622	.622
	.45	.455	.447	.440	.433	.433	.432	.432	.432	.432	.432
	.30	.322	.313	.306	.299	.299	.298	.298	.298	.298	.298
53.50	.7	—	—	—	—	—	—	—	—	—	—
	.45	—	—	—	—	—	—	—	—	—	—
	.30	—	—	—	—	—	—	—	—	—	—
54.50	.7	.647	.639	.631	.624	.624	.624	.624	.624	.624	.624
	.45	.457	.449	.442	.435	.435	.434	.434	.434	.434	.434
	.30	.323	.314	.307	.300	.300	.299	.299	.299	.299	.299
59.50	.7	.650	.642	.634	.627	.627	.627	.627	.627	.627	.627
	.45	.459	.451	.444	.437	.437	.436	.436	.436	.436	.436
	.30	.324	.315	.308	.301	.301	.299	.299	.299	.299	.299
61.50	.7	.652	.644	.636	.629	.629	.629	.629	.629	.629	.629
	.45	.461	.453	.446	.439	.439	.438	.438	.438	.438	.438
	.30	.325	.316	.309	.302	.302	.301	.301	.301	.301	.301
64.50	.7	.654	.646	.638	.631	.631	.631	.631	.631	.631	.631
	.45	.463	.455	.448	.441	.441	.440	.440	.440	.440	.440
	.30	.326	.317	.310	.303	.303	.302	.302	.302	.302	.302
65.50	.7	.656	.648	.640	.633	.633	.633	.633	.633	.633	.633
	.45	.465	.457	.450	.443	.443	.442	.442	.442	.442	.442
	.30	.327	.318	.311	.304	.304	.303	.303	.303	.303	.303
69.50	.7	.658	.650	.642	.635	.635	.635	.635	.635	.635	.635
	.45	.467	.459	.452	.445	.445	.444	.444	.444	.444	.444
	.30	.328	.319	.312	.305	.305	.304	.304	.304	.304	.304
70.50	.7	—	—	—	—	—	—	—	—	—	—
	.45	—	—	—	—	—	—	—	—	—	—
	.30	—	—	—	—	—	—	—	—	—	—

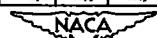
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TABLE III.—CONTINUED

(e) M,0.80.

(f) M,0.82.

Station (in.)	Percent freestream reduces	Angle of attack, deg											
		-4			0			4			8		
		Upper surface	Lower surface	Upper surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface
10	8.7	.000	.018	.000	.001	.014	.016	.005	.007	.003	.010	.011	.010
	45.3	.001	.001	.001	.001	.002	.011	.003	.007	.003	.009	.009	.009
	70.7	.001	.003	.001	.001	.002	.011	.009	.003	.005	.009	.009	.009
15	8.7	.050	.005	.005	.013	.009	.003	.008	.013	.030	.011	.030	.011
	45.3	.050	.005	.005	.013	.009	.003	.008	.013	.030	.011	.030	.011
	70.7	.050	.005	.005	.013	.009	.003	.008	.013	.030	.011	.030	.011
20	8.7	.035	.005	.005	.010	.007	.018	.019	.010	.008	.014	.003	.008
	45.3	.035	.005	.005	.013	.013	.019	.010	.013	.017	.006	.003	.007
	70.7	.035	.005	.005	.013	.013	.019	.010	.013	.017	.006	.003	.007
25	8.7	.012	.018	.011	.041	.024	.010	.010	.019	.025	.028	.011	.025
	45.3	.012	.018	.011	.041	.024	.010	.010	.019	.025	.028	.011	.025
	70.7	.012	.018	.011	.041	.024	.010	.010	.019	.025	.028	.011	.025
30	8.7	.012	.005	.005	.010	.007	.018	.019	.010	.008	.014	.003	.008
	45.3	.012	.005	.005	.010	.007	.018	.019	.010	.008	.014	.003	.008
	70.7	.012	.005	.005	.010	.007	.018	.019	.010	.008	.014	.003	.008
35	8.7	.011	.005	.011	.025	.024	.027	.019	.019	.022	.022	.011	.022
	45.3	.011	.005	.011	.025	.024	.027	.019	.019	.022	.022	.011	.022
	70.7	.011	.005	.011	.025	.024	.027	.019	.019	.022	.022	.011	.022
40	8.7	.007	.005	.007	.011	.007	.018	.019	.010	.008	.014	.003	.008
	45.3	.007	.005	.007	.011	.007	.018	.019	.010	.008	.014	.003	.008
	70.7	.007	.005	.007	.011	.007	.018	.019	.010	.008	.014	.003	.008
45	8.7	.005	.005	.005	.010	.005	.018	.019	.010	.008	.014	.003	.008
	45.3	.005	.005	.005	.010	.005	.018	.019	.010	.008	.014	.003	.008
	70.7	.005	.005	.005	.010	.005	.018	.019	.010	.008	.014	.003	.008
50	8.7	.004	.005	.004	.008	.004	.018	.019	.010	.008	.014	.003	.008
	45.3	.004	.005	.004	.008	.004	.018	.019	.010	.008	.014	.003	.008
	70.7	.004	.005	.004	.008	.004	.018	.019	.010	.008	.014	.003	.008
55	8.7	.003	.005	.003	.006	.003	.018	.019	.010	.008	.014	.003	.008
	45.3	.003	.005	.003	.006	.003	.018	.019	.010	.008	.014	.003	.008
	70.7	.003	.005	.003	.006	.003	.018	.019	.010	.008	.014	.003	.008
60	8.7	.002	.005	.002	.005	.002	.018	.019	.010	.008	.014	.003	.008
	45.3	.002	.005	.002	.005	.002	.018	.019	.010	.008	.014	.003	.008
	70.7	.002	.005	.002	.005	.002	.018	.019	.010	.008	.014	.003	.008
65	8.7	.001	.005	.001	.004	.001	.018	.019	.010	.008	.014	.003	.008
	45.3	.001	.005	.001	.004	.001	.018	.019	.010	.008	.014	.003	.008
	70.7	.001	.005	.001	.004	.001	.018	.019	.010	.008	.014	.003	.008
70	8.7	.000	.005	.000	.003	.000	.018	.019	.010	.008	.014	.003	.008
	45.3	.000	.005	.000	.003	.000	.018	.019	.010	.008	.014	.003	.008
	70.7	.000	.005	.000	.003	.000	.018	.019	.010	.008	.014	.003	.008
75	8.7	-.001	-.005	-.001	-.006	-.001	-.018	-.019	-.010	-.008	-.014	-.003	-.008
	45.3	-.001	-.005	-.001	-.006	-.001	-.018	-.019	-.010	-.008	-.014	-.003	-.008
	70.7	-.001	-.005	-.001	-.006	-.001	-.018	-.019	-.010	-.008	-.014	-.003	-.008
80	8.7	-.002	-.005	-.001	-.006	-.002	-.018	-.019	-.010	-.008	-.014	-.003	-.008
	45.3	-.002	-.005	-.001	-.006	-.002	-.018	-.019	-.010	-.008	-.014	-.003	-.008
	70.7	-.002	-.005	-.001	-.006	-.002	-.018	-.019	-.010	-.008	-.014	-.003	-.008
85	8.7	-.003	-.005	-.002	-.006	-.003	-.018	-.019	-.010	-.008	-.014	-.003	-.008
	45.3	-.003	-.005	-.002	-.006	-.003	-.018	-.019	-.010	-.008	-.014	-.003	-.008
	70.7	-.003	-.005	-.002	-.006	-.003	-.018	-.019	-.010	-.008	-.014	-.003	-.008
90	8.7	-.004	-.005	-.003	-.006	-.004	-.018	-.019	-.010	-.008	-.014	-.003	-.008
	45.3	-.004	-.005	-.003	-.006	-.004	-.018	-.019	-.010	-.008	-.014	-.003	-.008
	70.7	-.004	-.005	-.003	-.006	-.004	-.018	-.019	-.010	-.008	-.014	-.003	-.008



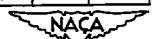
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TABLE III.—CONTINUED

(g) M,0.84.

Elev- ation (m.)	Percent fuel-oil ratio	Angle of attack, degrees											
		-1		-2		0		2		4		6	
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
18	8.7	-0.007	-0.007	-0.008	-0.007	-0.009	-0.009	-0.009	-0.009	-0.006	-0.006	-0.013	-0.013
	16.3	-0.008	-0.003	-0.003	-0.003	-0.004	-0.004	-0.004	-0.004	-0.003	-0.003	-0.013	-0.013
	30.7	-0.015	-0.007	-0.003	-0.003	-0.004	-0.004	-0.004	-0.004	-0.003	-0.003	-0.015	-0.015
15	8.7	-0.014	-0.014	-0.013	-0.013	-0.014	-0.014	-0.014	-0.014	-0.013	-0.013	-0.014	-0.014
	16.3	-0.014	-0.014	-0.013	-0.013	-0.014	-0.014	-0.014	-0.014	-0.013	-0.013	-0.014	-0.014
	30.7	-0.014	-0.014	-0.013	-0.013	-0.014	-0.014	-0.014	-0.014	-0.013	-0.013	-0.014	-0.014
30	8.7	-0.023	-0.022	-0.021	-0.021	-0.020	-0.020	-0.020	-0.020	-0.019	-0.019	-0.020	-0.020
	16.3	-0.023	-0.022	-0.021	-0.021	-0.020	-0.020	-0.020	-0.020	-0.019	-0.019	-0.020	-0.020
	30.7	-0.023	-0.022	-0.021	-0.021	-0.020	-0.020	-0.020	-0.020	-0.019	-0.019	-0.020	-0.020
35	8.7	-0.034	-0.034	-0.033	-0.033	-0.034	-0.034	-0.034	-0.034	-0.033	-0.033	-0.034	-0.034
	16.3	-0.034	-0.034	-0.033	-0.033	-0.034	-0.034	-0.034	-0.034	-0.033	-0.033	-0.034	-0.034
	30.7	-0.034	-0.034	-0.033	-0.033	-0.034	-0.034	-0.034	-0.034	-0.033	-0.033	-0.034	-0.034
45	8.7	-0.051	-0.046	-0.043	-0.043	-0.048	-0.048	-0.048	-0.048	-0.047	-0.047	-0.047	-0.047
	16.3	-0.051	-0.046	-0.043	-0.043	-0.048	-0.048	-0.048	-0.048	-0.047	-0.047	-0.047	-0.047
	30.7	-0.051	-0.046	-0.043	-0.043	-0.048	-0.048	-0.048	-0.048	-0.047	-0.047	-0.047	-0.047
55.36	8.7	-0.075	-0.066	-0.055	-0.055	-0.071	-0.071	-0.071	-0.071	-0.070	-0.070	-0.070	-0.070
	16.3	-0.075	-0.066	-0.055	-0.055	-0.071	-0.071	-0.071	-0.071	-0.070	-0.070	-0.070	-0.070
	30.7	-0.075	-0.066	-0.055	-0.055	-0.071	-0.071	-0.071	-0.071	-0.070	-0.070	-0.070	-0.070
31.35	8.7	-0.093	-0.077	-0.065	-0.065	-0.077	-0.077	-0.077	-0.077	-0.076	-0.076	-0.076	-0.076
	16.3	-0.093	-0.077	-0.065	-0.065	-0.077	-0.077	-0.077	-0.077	-0.076	-0.076	-0.076	-0.076
	30.7	-0.093	-0.077	-0.065	-0.065	-0.077	-0.077	-0.077	-0.077	-0.076	-0.076	-0.076	-0.076
34.20	8.7	-0.101	-0.081	-0.061	-0.061	-0.085	-0.085	-0.085	-0.085	-0.084	-0.084	-0.084	-0.084
	16.3	-0.101	-0.081	-0.061	-0.061	-0.085	-0.085	-0.085	-0.085	-0.084	-0.084	-0.084	-0.084
	30.7	-0.101	-0.081	-0.061	-0.061	-0.085	-0.085	-0.085	-0.085	-0.084	-0.084	-0.084	-0.084
38.00	8.7	-0.115	-0.099	-0.074	-0.074	-0.115	-0.115	-0.115	-0.115	-0.114	-0.114	-0.114	-0.114
	16.3	-0.115	-0.099	-0.074	-0.074	-0.115	-0.115	-0.115	-0.115	-0.114	-0.114	-0.114	-0.114
	30.7	-0.115	-0.099	-0.074	-0.074	-0.115	-0.115	-0.115	-0.115	-0.114	-0.114	-0.114	-0.114
41.30	8.7	-0.129	-0.117	-0.091	-0.091	-0.129	-0.129	-0.129	-0.129	-0.128	-0.128	-0.128	-0.128
	16.3	-0.129	-0.117	-0.091	-0.091	-0.129	-0.129	-0.129	-0.129	-0.128	-0.128	-0.128	-0.128
	30.7	-0.129	-0.117	-0.091	-0.091	-0.129	-0.129	-0.129	-0.129	-0.128	-0.128	-0.128	-0.128
44.30	8.7	-0.142	-0.136	-0.107	-0.107	-0.142	-0.142	-0.142	-0.142	-0.141	-0.141	-0.141	-0.141
	16.3	-0.142	-0.136	-0.107	-0.107	-0.142	-0.142	-0.142	-0.142	-0.141	-0.141	-0.141	-0.141
	30.7	-0.142	-0.136	-0.107	-0.107	-0.142	-0.142	-0.142	-0.142	-0.141	-0.141	-0.141	-0.141
47.20	8.7	-0.156	-0.149	-0.127	-0.127	-0.156	-0.156	-0.156	-0.156	-0.155	-0.155	-0.155	-0.155
	16.3	-0.156	-0.149	-0.127	-0.127	-0.156	-0.156	-0.156	-0.156	-0.155	-0.155	-0.155	-0.155
	30.7	-0.156	-0.149	-0.127	-0.127	-0.156	-0.156	-0.156	-0.156	-0.155	-0.155	-0.155	-0.155
50.30	8.7	-0.167	-0.154	-0.132	-0.132	-0.167	-0.167	-0.167	-0.167	-0.166	-0.166	-0.166	-0.166
	16.3	-0.167	-0.154	-0.132	-0.132	-0.167	-0.167	-0.167	-0.167	-0.166	-0.166	-0.166	-0.166
	30.7	-0.167	-0.154	-0.132	-0.132	-0.167	-0.167	-0.167	-0.167	-0.166	-0.166	-0.166	-0.166
53.30	8.7	-0.176	-0.165	-0.141	-0.141	-0.176	-0.176	-0.176	-0.176	-0.175	-0.175	-0.175	-0.175
	16.3	-0.176	-0.165	-0.141	-0.141	-0.176	-0.176	-0.176	-0.176	-0.175	-0.175	-0.175	-0.175
	30.7	-0.176	-0.165	-0.141	-0.141	-0.176	-0.176	-0.176	-0.176	-0.175	-0.175	-0.175	-0.175
57.30	8.7	-0.186	-0.176	-0.153	-0.153	-0.186	-0.186	-0.186	-0.186	-0.185	-0.185	-0.185	-0.185
	16.3	-0.186	-0.176	-0.153	-0.153	-0.186	-0.186	-0.186	-0.186	-0.185	-0.185	-0.185	-0.185
	30.7	-0.186	-0.176	-0.153	-0.153	-0.186	-0.186	-0.186	-0.186	-0.185	-0.185	-0.185	-0.185
59.30	8.7	-0.198	-0.188	-0.164	-0.164	-0.198	-0.198	-0.198	-0.198	-0.197	-0.197	-0.197	-0.197
	16.3	-0.198	-0.188	-0.164	-0.164	-0.198	-0.198	-0.198	-0.198	-0.197	-0.197	-0.197	-0.197
	30.7	-0.198	-0.188	-0.164	-0.164	-0.198	-0.198	-0.198	-0.198	-0.197	-0.197	-0.197	-0.197

(h) M, 0.86.



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GENEADENUTAT

TABLE III.—CONTINUED

(i) M, 0.88.

(j) M, 0.90.

Station (in.)	Percent fuel-oil radius	Angle of attack, degrees											
		-4		-2		0		2		4		6	
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
10	8.7	.097	.087	.068	.065	.056	.051	.041	.036	.024	.014	.004	.001
	12.3	.098	.087	.068	.065	.056	.051	.041	.036	.024	.014	.004	.001
	70.7	.077	.065	.055	.052	.046	.041	.031	.026	.014	.004	.001	.001
15	8.7	.097	.087	.068	.065	.056	.051	.041	.036	.024	.014	.004	.001
	12.3	.097	.087	.068	.065	.056	.051	.041	.036	.024	.014	.004	.001
	70.7	.077	.065	.055	.052	.046	.041	.031	.026	.014	.004	.001	.001
20	8.7	.098	.088	.070	.065	.057	.050	.043	.036	.026	.017	.008	.002
	12.3	.097	.087	.070	.065	.056	.050	.043	.036	.026	.017	.008	.002
	70.7	.076	.065	.055	.052	.046	.040	.033	.026	.017	.008	.002	.001
25	8.7	.097	.087	.070	.065	.056	.050	.043	.036	.026	.017	.008	.002
	12.3	.097	.087	.070	.065	.056	.050	.043	.036	.026	.017	.008	.002
	70.7	.076	.065	.055	.052	.046	.040	.033	.026	.017	.008	.002	.001
30-30	8.7	.097	.088	.070	.065	.056	.050	.043	.036	.026	.017	.008	.002
	12.3	.097	.088	.070	.065	.056	.050	.043	.036	.026	.017	.008	.002
	70.7	.076	.065	.055	.052	.046	.040	.033	.026	.017	.008	.002	.001
31-30	8.7	.097	.088	.070	.065	.056	.050	.043	.036	.026	.017	.008	.002
	12.3	.097	.088	.070	.065	.056	.050	.043	.036	.026	.017	.008	.002
	70.7	.076	.065	.055	.052	.046	.040	.033	.026	.017	.008	.002	.001
34-30	8.7	.097	.088	.070	.065	.056	.050	.043	.036	.026	.017	.008	.002
	12.3	.097	.088	.070	.065	.056	.050	.043	.036	.026	.017	.008	.002
	70.7	.076	.065	.055	.052	.046	.040	.033	.026	.017	.008	.002	.001
36-30	8.7	.097	.088	.070	.065	.056	.050	.043	.036	.026	.017	.008	.002
	12.3	.097	.088	.070	.065	.056	.050	.043	.036	.026	.017	.008	.002
	70.7	.076	.065	.055	.052	.046	.040	.033	.026	.017	.008	.002	.001
41-30	8.7	.097	.088	.070	.065	.056	.050	.043	.036	.026	.017	.008	.002
	12.3	.097	.088	.070	.065	.056	.050	.043	.036	.026	.017	.008	.002
	70.7	.076	.065	.055	.052	.046	.040	.033	.026	.017	.008	.002	.001
44-30	8.7	.097	.088	.070	.065	.056	.050	.043	.036	.026	.017	.008	.002
	12.3	.097	.088	.070	.065	.056	.050	.043	.036	.026	.017	.008	.002
	70.7	.076	.065	.055	.052	.046	.040	.033	.026	.017	.008	.002	.001
47-30	8.7	.098	.089	.071	.066	.057	.051	.044	.037	.027	.018	.009	.003
	12.3	.098	.089	.071	.066	.057	.051	.044	.037	.027	.018	.009	.003
	70.7	.077	.066	.056	.053	.047	.041	.034	.027	.018	.009	.003	.002
50-30	8.7	.098	.089	.071	.066	.057	.051	.044	.037	.027	.018	.009	.003
	12.3	.098	.089	.071	.066	.057	.051	.044	.037	.027	.018	.009	.003
	70.7	.077	.066	.056	.053	.047	.041	.034	.027	.018	.009	.003	.002
53-30	8.7	--	.093	--	.089	.070	.055	.041	.027	--	.018	.009	--
	12.3	--	.093	--	.089	.070	.055	.041	.027	--	.018	.009	--
	70.7	--	.093	--	.089	.070	.055	.041	.027	--	.018	.009	--
56-30	8.7	--	.093	--	.089	.070	.055	.041	.027	--	.018	.009	--
	12.3	--	.093	--	.089	.070	.055	.041	.027	--	.018	.009	--
	70.7	--	.093	--	.089	.070	.055	.041	.027	--	.018	.009	--
59-30	8.7	--	.095	--	.090	.071	.056	.042	.028	--	.019	.010	--
	12.3	--	.095	--	.090	.071	.056	.042	.028	--	.019	.010	--
	70.7	--	.095	--	.090	.071	.056	.042	.028	--	.019	.010	--

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TABLE III.— CONCLUDED

(k) M, 0.92.

(1) M, 0.94.



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TABLE IV.—PRESSURE COEFFICIENTS ON A FUSELAGE IN COMBINATION WITH A WING HAVING A SWEEPBACK ANGLE OF 45° AND AN ASPECT RATIO OF 6.

(a) M.O.40.

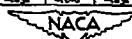
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TABLE IV.—CONTINUED

(b) M, O.60.

(c) M, 0.70.

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TABLE IV.—CONTINUED

(d) M,0.75.

(e) M.O.80.

CONTINUATION



TABLE IV.—CONTINUED

(f) M, 0.82.

(g) M, 0.84

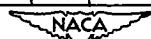


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TABLE IV.—CONTINUED

(h) M, O.86.

(i) M.O.88.



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TABLE IV.—CONTINUED

(j) M, O.90.

Station (in.)	Percent freightage revenue	Angle of attack, degrees							
		-1		-6		6		12	
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
18	8.7 45.3 70.7	.069 .099 .085	.039 .041 .040	.077 .075 .070	.036 .061 .060	.050 .053 .050	.028 .029 .028	.028 .031 .031	.028 .029 .029
19	8.7 45.3 70.7	.051 .077 .084	.118 .103 .113	.135 .125 .125	.105 .101 .101	.100 .105 .100	.085 .085 .085	.094 .094 .094	.087 .087 .087
20	8.7 45.3 70.7	.059 .081 .088	.104 .101 .108	.100 .097 .095	.080 .089 .088	.085 .088 .085	.065 .068 .065	.068 .073 .071	.063 .063 .063
21	8.7 45.3 70.7	.060 .083 .083	.101 .098 .098	.100 .095 .095	.088 .089 .088	.085 .085 .085	.066 .065 .065	.066 .065 .065	.061 .061 .061
22	8.7 45.3 70.7	.060 .081 .081	.105 .102 .102	.100 .098 .098	.085 .085 .085	.085 .085 .085	.066 .065 .065	.066 .065 .065	.061 .061 .061
23.50	8.7 45.3 70.7	.060 .081 .081	.105 .102 .102	.100 .098 .098	.085 .085 .085	.085 .085 .085	.066 .065 .065	.066 .065 .065	.061 .061 .061
31.70	8.7 45.3 70.7	.071 .091 .091	.101 .098 .101	.105 .098 .105	.085 .088 .088	.085 .085 .085	.068 .068 .068	.068 .068 .068	.064 .064 .064
34.50	8.7 45.3 70.7	.068 .078 .080	.103 .100 .100	.101 .096 .096	.082 .082 .082	.082 .083 .082	.064 .065 .065	.064 .065 .065	.060 .060 .060
37.50	8.7 45.3 70.7	.078 .098 .098	.115 .111 .110	.108 .108 .108	.088 .088 .088	.085 .085 .085	.068 .068 .068	.068 .068 .068	.064 .064 .064
41.50	8.7 45.3 70.7	.081 .098 .098	.145 .135 .135	.135 .130 .130	.115 .115 .115	.093 .093 .093	.093 .093 .093	.107 .107 .107	.098 .098 .098
44.50	8.7 45.3 70.7	.086 .095 .095	.157 .154 .155	.151 .149 .151	.136 .131 .131	.113 .113 .113	.113 .113 .113	.113 .113 .113	.102 .102 .102
47.50	8.7 45.3 70.7	.086 .093 .093	.138 .130 .130	.129 .120 .120	.105 .105 .105	.071 .071 .070	.065 .065 .065	.065 .065 .065	.061 .061 .061
50.50	8.7 45.3 70.7	.085 .091 .091	.141 .131 .131	.131 .123 .123	.111 .109 .109	.073 .073 .073	.063 .063 .063	.064 .063 .063	.063 .063 .063
53.50	8.7 45.3 70.7	--	--	.054 .054 .050	.030 .029 .029	.010 .010 .010	.005 .005 .005	.005 .005 .005	.005 .005 .005
56.50	8.7 45.3 70.7	.085 .091 .091	.150 .149 .148	.145 .139 .139	.121 .119 .119	.081 .081 .081	.061 .061 .061	.061 .061 .061	.061 .061 .061
59.50	8.7 45.3 70.7	.086 .093 .093	.146 .139 .139	.139 .130 .130	.116 .110 .110	.086 .086 .086	.066 .066 .066	.066 .066 .066	.066 .066 .066

(k) M,0.92.

Station (in.)	Percent fuselage radius	Angle of attack, degrees									
		-5		0		5		10		15	
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
30	8.7	.036	.000	.100	.077	.076	.070	.086	.081	.075	.030
	42.3	.132	.056	.100	.050	.076	.071	.078	.080	.080	.076
	70.7	.086	.050	.068	.050	.073	.073	.078	.070	.060	.076
15	8.7	.075	.080	.061	.088	.053	.055	.015	.042	.032	.060
	42.3	.059	.061	.061	.082	.058	.058	.020	.040	.030	.060
	70.7	.079	.061	.061	.082	.058	.058	.020	.040	.030	.060
20	8.7	.045	.000	.001	.005	.001	.001	.009	.001	.009	.030
	42.3	.045	.000	.001	.005	.001	.001	.009	.001	.009	.030
	70.7	.045	.000	.001	.005	.001	.001	.009	.001	.009	.030
25	8.7	.031	.000	.032	.018	.011	.004	.008	.011	.011	.008
	42.3	.031	.000	.032	.018	.011	.004	.008	.011	.011	.008
	70.7	.031	.000	.032	.018	.011	.004	.008	.011	.011	.008
35.50	8.7	.031	.000	.001	.005	.001	.001	.009	.001	.009	.010
	42.3	.031	.000	.001	.005	.001	.001	.009	.001	.009	.010
	70.7	.031	.000	.001	.005	.001	.001	.009	.001	.009	.010
31.50	8.7	.050	.010	.040	.031	.032	.033	.033	.033	.033	.050
	42.3	.057	.010	.040	.035	.032	.033	.033	.033	.033	.057
	70.7	.051	.002	.040	.035	.032	.033	.033	.033	.033	.051
36.50	8.7	.068	.018	.060	.080	.080	.080	.018	.042	.042	.068
	42.3	.058	.012	.060	.070	.071	.070	.018	.042	.042	.068
	70.7	.115	.020	.060	.071	.071	.070	.018	.042	.042	.068
37.50	8.7	.050	.010	.040	.032	.032	.032	.018	.033	.033	.050
	42.3	.050	.010	.040	.032	.032	.032	.018	.033	.033	.050
	70.7	.070	.010	.040	.032	.032	.032	.018	.033	.033	.050
41.50	8.7	.110	.160	.100	.130	.100	.100	.100	.100	.100	.100
	42.3	.100	.160	.100	.130	.100	.100	.100	.100	.100	.100
	70.7	.090	.160	.100	.130	.100	.100	.100	.100	.100	.100
44.50	8.7	.100	.110	.100	.100	.100	.100	.100	.100	.100	.100
	42.3	.100	.110	.100	.100	.100	.100	.100	.100	.100	.100
	70.7	.100	.110	.100	.100	.100	.100	.100	.100	.100	.100
47.50	8.7	.100	.100	.100	.100	.100	.100	.100	.100	.100	.100
	42.3	.100	.100	.100	.100	.100	.100	.100	.100	.100	.100
	70.7	.100	.100	.100	.100	.100	.100	.100	.100	.100	.100
50.50	8.7	.100	.090	.100	.090	.100	.100	.100	.100	.100	.100
	42.3	.100	.090	.100	.090	.100	.100	.100	.100	.100	.100
	70.7	.100	.090	.100	.090	.100	.100	.100	.100	.100	.100
53.50	8.7	.100	.090	.100	.090	.100	.100	.100	.100	.100	.100
	42.3	.100	.090	.100	.090	.100	.100	.100	.100	.100	.100
	70.7	.100	.090	.100	.090	.100	.100	.100	.100	.100	.100
56.50	8.7	.100	.090	.100	.090	.100	.100	.100	.100	.100	.100
	42.3	.100	.090	.100	.090	.100	.100	.100	.100	.100	.100
	70.7	.100	.090	.100	.090	.100	.100	.100	.100	.100	.100
59.50	8.7	.100	.090	.100	.090	.100	.100	.100	.100	.100	.100
	42.3	.100	.090	.100	.090	.100	.100	.100	.100	.100	.100
	70.7	.100	.090	.100	.090	.100	.100	.100	.100	.100	.100



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TABLE IV.— CONCLUDED.

(1) M, 0.94.

Station (in.)	Percent fuselage radius	Angle of attack, degrees									
		-4		-2		0		2		4	
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
10	8.7 42.3 70.7	.029 .125 .112	.022 .068 .062	.010 .101 .072	.006 .059 .061	.023 .081 .081	.018 .078 .070	.051 .070 .087	.099 .099 .087	.041 .045 .048	.103 .099 .087
15	8.7 42.3 70.7	.024 .079 .068	.020 .023 .030	.063 .060 .059	.030 .025 .030	.042 .040 .042	.040 .033 .039	.028 .030 .032	.060 .050 .047	.010 .010 .010	.061 .051 .043
20	8.7 42.3 70.7	.046 .036 .023	-.009 -.016 -.010	.020 .018 .010	-.008 -.008 -.010	-.009 0 0	.002 .001 0	0 -.002 -.002	.023 .018 .015	-.019 -.018 -.020	.085 .078 .078
25	8.7 42.3 70.7	.031 .020 .015	-.012 -.010 -.010	.010 .008 .003	-.012 -.012 -.010	-.005 -.010 -.010	-.014 -.012 -.003	-.005 -.010 -.009	.015 .009 .009	-.021 -.027 -.027	.015 .010 .009
28.50	8.7 42.3 70.7	.040 .032 .022	.009 .012 .009	.018 .005 .009	.005 0 0	.013 .012 .009	.013 .012 .009	.009 .009 .019	.031 .029 .019	-.002 0 -.008	.031 .031 .031
31.50	8.7 42.3 70.7	.059 .055 .051	.019 .020 .025	.035 .030 .041	.010 .011 .021	.019 .030 .030	.019 .030 .035	.020 .022 .049	.045 .044 .046	.011 .012 .016	.091 .044 .091
34.50	8.7 42.3 70.7	.090 .059 .110	-.008 -.005 -.009	.065 .080 .092	.018 .020 .030	.035 .045 .055	.035 .050 .059	.019 .022 .022	.065 .078 .097	-.006 -.004 -.013	.085 .093 .113
37.50	8.7 42.3 70.7	.060 .050 .072	-.082 -.090 -.103	.029 .021 .041	-.090 -.053 -.069	-.017 -.029 -.012	-.010 -.010 -.020	-.050 -.050 -.060	.034 .041 .041	-.090 -.112 .117	.060 .070 .072
41.50	8.7 42.3 70.7	.020 .014 .007	-.148 -.157 -.174	.003 -.010 -.019	-.091 -.099 -.115	-.069 -.080 -.095	-.075 -.083 -.090	-.110 -.120 -.138	-.020 -.028 -.035	-.159 -.171 -.190	.010 0 .002
44.50	8.7 42.3 70.7	-.026 .030 -.049	-.191 -.201 -.231	-.049 -.058 -.072	-.141 -.149 -.170	-.123 -.138 -.155	-.119 -.128 -.149	-.168 -.178 -.198	-.055 -.055 -.085	-.219 -.228 -.250	-.069 -.038 -.111
47.50	8.7 42.3 70.7	-.028 .019 -.042	-.230 -.232 -.265	-.070 -.024 -.082	-.230 -.210 -.239	-.138 -.085 -.145	-.128 -.140 -.145	-.195 -.130 -.218	-.052 -.060 -.067	-.253 -.185 -.281	-.040 -.045 -.059
50.50	8.7 42.3 70.7	-.021 -.020 -.026	-.109 -.129 -.098	-.040 -.033 -.030	-.049 -.074 -.059	-.040 -.049 -.035	-.051 -.048 -.060	-.081 -.072 -.089	-.010 -.032 -.029	-.162 -.150 -.130	-.009 -.040 -.045
53.50	8.7 42.3 70.7	---	-.018 0 .005	---	-.018 -.018 -.010	---	-.018 -.014 -.003	---	-.015 -.010 -.015	---	-.011 -.010 -.009
56.50	8.7 42.3 70.7	-.004 -.002 .010	-.025 -.013 0	-.015 -.020 -.025	-.020 -.028 -.005	-.025 -.018 -.010	-.029 -.022 -.013	-.080 -.021 -.010	-.020 -.015 -.015	-.068 -.062 -.008	-.011 -.009 -.008
59.50	8.7 42.3 70.7	.009 -.002 .001	.008 -.001 0	-.009 -.010 -.015	-.010 -.010 -.015	-.080 -.021 -.010	-.080 -.021 -.010	-.015 -.015 -.015	-.005 -.010 -.015	-.015 -.009 -.015	-.005 -.009 -.015

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TABLE V.— PRESSURE COEFFICIENTS ON A WING HAVING A SWEETBACK ANGLE OF 45° AND AN ASPECT RATIO OF 4 IN COMBINATION WITH A FUSELAGE.

(a) M, 0.40.

Angle of attack, degrees											
		-4		0		4		8		12	
Upper surface		Lower surface		Upper surface		Lower surface		Upper surface		Lower surface	
α	C_p	α	C_p	α	C_p	α	C_p	α	C_p	α	C_p
0	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02
2	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02
4	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02
6	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02
8	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02
10	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02
12	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02
14	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02
16	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02
18	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02

Angle of attack, degrees											
		-10		-8		-6		-4		-2	
Upper surface		Lower surface		Upper surface		Lower surface		Upper surface		Lower surface	
α	C_p	α	C_p	α	C_p	α	C_p	α	C_p	α	C_p
0	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02
2	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02
4	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02
6	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02
8	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02
10	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02
12	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02
14	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02
16	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02
18	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02	0	-0.02

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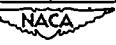
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TABLE V.—CONTINUED

(b) M, 0.60.

Re- com- mit- ment per- cent	Per- cent short	Angle of attack, degrees									
		-1	-2	0	2	4	6	8	10	12	14
15	0 +2 +4 +6 +8 +10 +12 +14 +16 +18	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
		0.195	0.149	—	—	0.310	0.170	—	—	0.398	0.190
		-0.195	-0.149	-0.308	-0.203	-0.408	-0.203	-0.407	-0.203	-0.406	-0.203
		-0.205	-0.165	-0.310	-0.203	-0.410	-0.203	-0.410	-0.203	-0.410	-0.203
		-0.095	-0.082	-0.165	-0.130	-0.165	-0.130	-0.165	-0.130	-0.165	-0.130
		-0.085	-0.072	-0.155	-0.120	-0.155	-0.120	-0.155	-0.120	-0.155	-0.120
		-0.075	-0.062	-0.145	-0.110	-0.145	-0.110	-0.145	-0.110	-0.145	-0.110
		-0.065	-0.052	-0.135	-0.100	-0.135	-0.100	-0.135	-0.100	-0.135	-0.100
		-0.055	-0.042	-0.125	-0.090	-0.125	-0.090	-0.125	-0.090	-0.125	-0.090
		-0.045	-0.032	-0.115	-0.080	-0.115	-0.080	-0.115	-0.080	-0.115	-0.080
17	0 +2 +4 +6 +8 +10 +12 +14 +16 +18	—	—	0.195	—	0.310	—	0.398	—	0.505	—
		-0.195	-0.149	-0.308	-0.203	-0.408	-0.203	-0.407	-0.203	-0.406	-0.203
		-0.190	-0.145	-0.310	-0.203	-0.410	-0.203	-0.410	-0.203	-0.410	-0.203
		-0.185	-0.140	-0.305	-0.203	-0.405	-0.203	-0.404	-0.203	-0.403	-0.203
		-0.180	-0.135	-0.300	-0.203	-0.400	-0.203	-0.403	-0.203	-0.402	-0.203
		-0.175	-0.130	-0.295	-0.203	-0.395	-0.203	-0.401	-0.203	-0.401	-0.203
		-0.170	-0.125	-0.290	-0.203	-0.390	-0.203	-0.399	-0.203	-0.399	-0.203
		-0.165	-0.120	-0.285	-0.203	-0.385	-0.203	-0.398	-0.203	-0.398	-0.203
		-0.160	-0.115	-0.280	-0.203	-0.380	-0.203	-0.397	-0.203	-0.397	-0.203
		-0.155	-0.110	-0.275	-0.203	-0.375	-0.203	-0.396	-0.203	-0.396	-0.203
19	0 +2 +4 +6 +8 +10 +12 +14 +16 +18	-0.150	-0.105	-0.270	-0.203	-0.370	-0.203	-0.395	-0.203	-0.395	-0.203
		-0.145	-0.100	-0.265	-0.203	-0.365	-0.203	-0.394	-0.203	-0.394	-0.203
		-0.140	-0.095	-0.260	-0.203	-0.360	-0.203	-0.393	-0.203	-0.393	-0.203
		-0.135	-0.090	-0.255	-0.203	-0.355	-0.203	-0.392	-0.203	-0.392	-0.203
		-0.130	-0.085	-0.250	-0.203	-0.350	-0.203	-0.391	-0.203	-0.391	-0.203
		-0.125	-0.080	-0.245	-0.203	-0.345	-0.203	-0.390	-0.203	-0.390	-0.203
		-0.120	-0.075	-0.240	-0.203	-0.340	-0.203	-0.389	-0.203	-0.389	-0.203
		-0.115	-0.070	-0.235	-0.203	-0.335	-0.203	-0.388	-0.203	-0.388	-0.203
		-0.110	-0.065	-0.230	-0.203	-0.330	-0.203	-0.387	-0.203	-0.387	-0.203
		-0.105	-0.060	-0.225	-0.203	-0.325	-0.203	-0.386	-0.203	-0.386	-0.203
21	0 +2 +4 +6 +8 +10 +12 +14 +16 +18	-0.100	-0.055	-0.220	-0.203	-0.320	-0.203	-0.385	-0.203	-0.385	-0.203
		-0.095	-0.050	-0.215	-0.203	-0.315	-0.203	-0.384	-0.203	-0.384	-0.203
		-0.090	-0.045	-0.210	-0.203	-0.310	-0.203	-0.383	-0.203	-0.383	-0.203
		-0.085	-0.040	-0.205	-0.203	-0.305	-0.203	-0.382	-0.203	-0.382	-0.203
		-0.080	-0.035	-0.200	-0.203	-0.300	-0.203	-0.381	-0.203	-0.381	-0.203
		-0.075	-0.030	-0.195	-0.203	-0.295	-0.203	-0.380	-0.203	-0.380	-0.203
		-0.070	-0.025	-0.190	-0.203	-0.290	-0.203	-0.379	-0.203	-0.379	-0.203
		-0.065	-0.020	-0.185	-0.203	-0.285	-0.203	-0.378	-0.203	-0.378	-0.203
		-0.060	-0.015	-0.180	-0.203	-0.280	-0.203	-0.377	-0.203	-0.377	-0.203
		-0.055	-0.010	-0.175	-0.203	-0.275	-0.203	-0.376	-0.203	-0.376	-0.203
23	0 +2 +4 +6 +8 +10 +12 +14 +16 +18	-0.050	-0.005	-0.170	-0.203	-0.270	-0.203	-0.375	-0.203	-0.375	-0.203
		-0.045	-0.000	-0.165	-0.203	-0.265	-0.203	-0.374	-0.203	-0.374	-0.203
		-0.040	-0.005	-0.160	-0.203	-0.260	-0.203	-0.373	-0.203	-0.373	-0.203
		-0.035	-0.000	-0.155	-0.203	-0.255	-0.203	-0.372	-0.203	-0.372	-0.203
		-0.030	-0.005	-0.150	-0.203	-0.250	-0.203	-0.371	-0.203	-0.371	-0.203
		-0.025	-0.000	-0.145	-0.203	-0.245	-0.203	-0.370	-0.203	-0.370	-0.203
		-0.020	-0.005	-0.140	-0.203	-0.240	-0.203	-0.369	-0.203	-0.369	-0.203
		-0.015	-0.000	-0.135	-0.203	-0.235	-0.203	-0.368	-0.203	-0.368	-0.203
		-0.010	-0.005	-0.130	-0.203	-0.230	-0.203	-0.367	-0.203	-0.367	-0.203
		-0.005	-0.000	-0.125	-0.203	-0.225	-0.203	-0.366	-0.203	-0.366	-0.203
25	0 +2 +4 +6 +8 +10 +12 +14 +16 +18	-0.000	-0.000	-0.120	-0.203	-0.220	-0.203	-0.365	-0.203	-0.365	-0.203
		-0.015	-0.005	-0.115	-0.203	-0.215	-0.203	-0.364	-0.203	-0.364	-0.203
		-0.010	-0.000	-0.110	-0.203	-0.210	-0.203	-0.363	-0.203	-0.363	-0.203
		-0.005	-0.005	-0.105	-0.203	-0.205	-0.203	-0.362	-0.203	-0.362	-0.203
		-0.000	-0.000	-0.100	-0.203	-0.200	-0.203	-0.361	-0.203	-0.361	-0.203
		-0.015	-0.005	-0.095	-0.203	-0.195	-0.203	-0.360	-0.203	-0.360	-0.203
		-0.010	-0.000	-0.090	-0.203	-0.190	-0.203	-0.359	-0.203	-0.359	-0.203
		-0.005	-0.005	-0.085	-0.203	-0.185	-0.203	-0.358	-0.203	-0.358	-0.203
		-0.000	-0.000	-0.080	-0.203	-0.180	-0.203	-0.357	-0.203	-0.357	-0.203
		-0.015	-0.005	-0.075	-0.203	-0.175	-0.203	-0.356	-0.203	-0.356	-0.203
27	0 +2 +4 +6 +8 +10 +12 +14 +16 +18	-0.000	-0.000	-0.070	-0.203	-0.170	-0.203	-0.355	-0.203	-0.355	-0.203
		-0.015	-0.005	-0.065	-0.203	-0.165	-0.203	-0.354	-0.203	-0.354	-0.203
		-0.010	-0.000	-0.060	-0.203	-0.160	-0.203	-0.353	-0.203	-0.353	-0.203
		-0.005	-0.005	-0.055	-0.203	-0.155	-0.203	-0.352	-0.203	-0.352	-0.203
		-0.000	-0.000	-0.050	-0.203	-0.150	-0.203	-0.351	-0.203	-0.351	-0.203
		-0.015	-0.005	-0.045	-0.203	-0.145	-0.203	-0.350	-0.203	-0.350	-0.203
		-0.010	-0.000	-0.040	-0.203	-0.140	-0.203	-0.349	-0.203	-0.349	-0.203
		-0.005	-0.005	-0.035	-0.203	-0.135	-0.203	-0.348	-0.203	-0.348	-0.203
		-0.000	-0.000	-0.030	-0.203	-0.130	-0.203	-0.347	-0.203	-0.347	-0.203
		-0.015	-0.005	-0.025	-0.203	-0.125	-0.203	-0.346	-0.203	-0.346	-0.203
29	0 +2 +4 +6 +8 +10 +12 +14 +16 +18	-0.000	-0.000	-0.020	-0.203	-0.120	-0.203	-0.345	-0.203	-0.345	-0.203
		-0.015	-0.005	-0.015	-0.203	-0.115	-0.203	-0.344	-0.203	-0.344	-0.203
		-0.010	-0.000	-0.010	-0.203	-0.110	-0.203	-0.343	-0.203	-0.343	-0.203
		-0.005	-0.005	-0.005	-0.203	-0.105	-0.203	-0.342	-0.203	-0.342	-0.203
		-0.000	-0.000	0.000	-0.203	-0.100	-0.203	-0.341	-0.203	-0.341	-0.203
		-0.015	-0.005	-0.005	-0.203	-0.095	-0.203	-0.340	-0.203	-0.340	-0.203
		-0.010	-0.000	0.000	-0.203	-0.090	-0.203	-0.339	-0.203	-0.339	-0.203
		-0.005	-0.005	-0.005	-0.203	-0.085	-0.203	-0.338	-0.203	-0.338	-0.203
		-0.000	-0.000	0.000	-0.203	-0.080	-0.203	-0.337	-0.203	-0.337	-0.203
		-0.015	-0.005	-0.005	-0.203	-0.075	-0.203	-0.336	-0.203	-0.336	-0.203
31	0 +2 +4 +6 +8 +10 +12 +14 +16 +18	-0.000	-0.000	-0.000	-0.203	-0.070	-0.203	-0.335	-0.203	-0.335	-0.203
		-0.015	-0.005	-0.005	-0.203	-0.065	-0.203	-0.334	-0.203	-0.334	-0.203
		-0.010	-0.000	0.000	-0.203	-0.060	-0.203	-0.333	-0.203	-0.333	-0.203
		-0.005	-0.005	-0.005	-0.203	-0.055	-0.203	-0.332	-0.203	-0.332	-0.203
		-0.000	-0.000	0.000	-0.203	-0.050	-0.203	-0.331	-0.203	-0.331	-0.203
		-0.015	-0.005	-0.005	-0.203	-0.045	-0.203	-0.330	-0.203	-0.330	-0.203
		-0.010	-0.000	0.000	-0.203	-0.040	-0.203	-0.329	-0.203	-0.329	-0.203
		-0.005	-0.005	-0.005	-0.203	-0.035	-0.203	-0.328	-0.203	-0.328	-0.203
		-0.000	-0.000	0.000	-0.203	-0.030	-0.203	-0.327	-0.203	-0.327	-0.203
		-0.015	-0.005	-0.005	-0.203	-0.025	-0.203	-0.326	-0.203	-0.326	-0.203

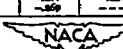
Pac- ket num- ber	Pac- ket shape	Angle of attack, degrees						Pac- ket num- ber	Pac- ket shape		
		0		10		20					
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface				
15	15	-0.618	-1.060	-1.120	-1.120	-1.118	-1.118	-0.666	0.666		
		-0.620	-1.062	-1.122	-1.122	-1.120	-1.120	-0.670	0.670		
		-0.622	-1.064	-1.124	-1.124	-1.122	-1.122	-0.672	0.672		
		-0.624	-1.066	-1.126	-1.126	-1.124	-1.124	-0.674	0.674		
		-0.626	-1.068	-1.128	-1.128	-1.126	-1.126	-0.676	0.676		
		-0.628	-1.070	-1.130	-1.130	-1.128	-1.128	-0.678	0.678		
		-0.630	-1.072	-1.132	-1.132	-1.130	-1.130	-0.680	0.680		
		-0.632	-1.074	-1.134	-1.134	-1.132	-1.132	-0.682	0.682		
		-0.634	-1.076	-1.136	-1.136	-1.134	-1.134	-0.684	0.684		
		-0.636	-1.078	-1.138	-1.138	-1.136	-1.136	-0.686	0.686		
16	16	-0.616	-1.050	-1.110	-1.110	-1.108	-1.108	-0.664	0.664		
		-0.618	-1.052	-1.112	-1.112	-1.110	-1.110	-0.666	0.666		
		-0.620	-1.054	-1.114	-1.114	-1.112	-1.112	-0.668	0.668		
		-0.622	-1.056	-1.116	-1.116	-1.114	-1.114	-0.670	0.670		
		-0.624	-1.058	-1.118	-1.118	-1.116	-1.116	-0.672	0.672		
		-0.626	-1.060	-1.120	-1.120	-1.118	-1.118	-0.674	0.674		
		-0.628	-1.062	-1.122	-1.122	-1.120	-1.120	-0.676	0.676		
		-0.630	-1.064	-1.124	-1.124	-1.122	-1.122	-0.678	0.678		
		-0.632	-1.066	-1.126	-1.126	-1.124	-1.124	-0.680	0.680		
		-0.634	-1.068	-1.128	-1.128	-1.126	-1.126	-0.682	0.682		
17	17	-0.614	-1.040	-1.100	-1.100	-1.098	-1.098	-0.662	0.662		
		-0.616	-1.042	-1.102	-1.102	-1.100	-1.100	-0.664	0.664		
		-0.618	-1.044	-1.104	-1.104	-1.102	-1.102	-0.666	0.666		
		-0.620	-1.046	-1.106	-1.106	-1.104	-1.104	-0.668	0.668		
		-0.622	-1.048	-1.108	-1.108	-1.106	-1.106	-0.670	0.670		
		-0.624	-1.050	-1.110	-1.110	-1.108	-1.108	-0.672	0.672		
		-0.626	-1.052	-1.112	-1.112	-1.110	-1.110	-0.674	0.674		
		-0.628	-1.054	-1.114	-1.114	-1.112	-1.112	-0.676	0.676		
		-0.630	-1.056	-1.116	-1.116	-1.114	-1.114	-0.678	0.678		
		-0.632	-1.058	-1.118	-1.118	-1.116	-1.116	-0.680	0.680		
18	18	-0.612	-1.030	-1.090	-1.090	-1.088	-1.088	-0.660	0.660		
		-0.614	-1.032	-1.092	-1.092	-1.090	-1.090	-0.662	0.662		
		-0.616	-1.034	-1.094	-1.094	-1.092	-1.092	-0.664	0.664		
		-0.618	-1.036	-1.096	-1.096	-1.094	-1.094	-0.666	0.666		
		-0.620	-1.038	-1.098	-1.098	-1.096	-1.096	-0.668	0.668		
		-0.622	-1.040	-1.100	-1.100	-1.098	-1.098	-0.670	0.670		
		-0.624	-1.042	-1.102	-1.102	-1.100	-1.100	-0.672	0.672		
		-0.626	-1.044	-1.104	-1.104	-1.102	-1.102	-0.674	0.674		
		-0.628	-1.046	-1.106	-1.106	-1.104	-1.104	-0.676	0.676		
		-0.630	-1.048	-1.108	-1.108	-1.106	-1.106	-0.678	0.678		



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TABLE V.—CONTINUED

(c) M, 0.70.



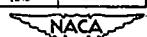
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TABLE V.—CONTINUED

(d) M,0.75.

Per- cent span	Per- cent chord	Angle of attack, degrees									
		-4		-2		0		2		4	
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
15	0	0.340	---	0.300	---	0.280	---	0.264	---	0.250	---
		-0.148	-0.016	-0.160	-0.160	-0.080	-0.080	-0.020	-0.020	-0.016	-0.016
		-0.282	-0.213	-0.288	-0.288	-0.188	-0.188	-0.124	-0.124	-0.097	-0.097
		-0.420	-0.325	-0.420	-0.420	-0.320	-0.320	-0.272	-0.272	-0.228	-0.228
		-0.558	-0.450	-0.558	-0.558	-0.450	-0.450	-0.397	-0.397	-0.350	-0.350
		-0.696	-0.550	-0.696	-0.696	-0.550	-0.550	-0.495	-0.495	-0.440	-0.440
		-0.834	-0.680	-0.834	-0.834	-0.680	-0.680	-0.620	-0.620	-0.560	-0.560
35	0	0.340	---	0.300	---	0.280	---	0.250	---	0.210	---
		-0.148	-0.016	-0.160	-0.160	-0.080	-0.080	-0.020	-0.020	-0.016	-0.016
		-0.282	-0.213	-0.288	-0.288	-0.188	-0.188	-0.124	-0.124	-0.097	-0.097
		-0.420	-0.325	-0.420	-0.420	-0.320	-0.320	-0.272	-0.272	-0.228	-0.228
		-0.558	-0.450	-0.558	-0.558	-0.450	-0.450	-0.397	-0.397	-0.350	-0.350
		-0.696	-0.550	-0.696	-0.696	-0.550	-0.550	-0.495	-0.495	-0.440	-0.440
		-0.834	-0.680	-0.834	-0.834	-0.680	-0.680	-0.620	-0.620	-0.560	-0.560
55	0	0.340	---	0.300	---	0.280	---	0.250	---	0.210	---
		-0.148	-0.016	-0.160	-0.160	-0.080	-0.080	-0.020	-0.020	-0.016	-0.016
		-0.282	-0.213	-0.288	-0.288	-0.188	-0.188	-0.124	-0.124	-0.097	-0.097
		-0.420	-0.325	-0.420	-0.420	-0.320	-0.320	-0.272	-0.272	-0.228	-0.228
		-0.558	-0.450	-0.558	-0.558	-0.450	-0.450	-0.397	-0.397	-0.350	-0.350
		-0.696	-0.550	-0.696	-0.696	-0.550	-0.550	-0.495	-0.495	-0.440	-0.440
		-0.834	-0.680	-0.834	-0.834	-0.680	-0.680	-0.620	-0.620	-0.560	-0.560
75	0	0.340	---	0.300	---	0.280	---	0.250	---	0.210	---
		-0.148	-0.016	-0.160	-0.160	-0.080	-0.080	-0.020	-0.020	-0.016	-0.016
		-0.282	-0.213	-0.288	-0.288	-0.188	-0.188	-0.124	-0.124	-0.097	-0.097
		-0.420	-0.325	-0.420	-0.420	-0.320	-0.320	-0.272	-0.272	-0.228	-0.228
		-0.558	-0.450	-0.558	-0.558	-0.450	-0.450	-0.397	-0.397	-0.350	-0.350
		-0.696	-0.550	-0.696	-0.696	-0.550	-0.550	-0.495	-0.495	-0.440	-0.440
		-0.834	-0.680	-0.834	-0.834	-0.680	-0.680	-0.620	-0.620	-0.560	-0.560
95	0	0.340	---	0.300	---	0.280	---	0.250	---	0.210	---
		-0.148	-0.016	-0.160	-0.160	-0.080	-0.080	-0.020	-0.020	-0.016	-0.016
		-0.282	-0.213	-0.288	-0.288	-0.188	-0.188	-0.124	-0.124	-0.097	-0.097
		-0.420	-0.325	-0.420	-0.420	-0.320	-0.320	-0.272	-0.272	-0.228	-0.228
		-0.558	-0.450	-0.558	-0.558	-0.450	-0.450	-0.397	-0.397	-0.350	-0.350
		-0.696	-0.550	-0.696	-0.696	-0.550	-0.550	-0.495	-0.495	-0.440	-0.440
		-0.834	-0.680	-0.834	-0.834	-0.680	-0.680	-0.620	-0.620	-0.560	-0.560

Per- cent load on wing	Per- cent shear	Angle of attack, degrees						Upper surface slope	Lower surface slope		
		6		8		10					
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface				
15	0.00	-0.170	-0.170	-0.365	-0.365	-0.400	-0.400	-0.400	-0.400		
	-0.361	-0.169	-0.169	-0.360	-0.360	-0.398	-0.398	-0.398	-0.398		
	-0.350	-0.168	-0.168	-0.359	-0.359	-0.397	-0.397	-0.397	-0.397		
	-0.340	-0.167	-0.167	-0.358	-0.358	-0.396	-0.396	-0.396	-0.396		
	-0.330	-0.166	-0.166	-0.357	-0.357	-0.395	-0.395	-0.395	-0.395		
	-0.320	-0.165	-0.165	-0.356	-0.356	-0.394	-0.394	-0.394	-0.394		
	-0.310	-0.164	-0.164	-0.355	-0.355	-0.393	-0.393	-0.393	-0.393		
	-0.300	-0.163	-0.163	-0.354	-0.354	-0.392	-0.392	-0.392	-0.392		
	-0.290	-0.162	-0.162	-0.353	-0.353	-0.391	-0.391	-0.391	-0.391		
	-0.280	-0.161	-0.161	-0.352	-0.352	-0.390	-0.390	-0.390	-0.390		
	-0.270	-0.160	-0.160	-0.351	-0.351	-0.389	-0.389	-0.389	-0.389		
	-0.260	-0.159	-0.159	-0.350	-0.350	-0.388	-0.388	-0.388	-0.388		
	-0.250	-0.158	-0.158	-0.349	-0.349	-0.387	-0.387	-0.387	-0.387		
	-0.240	-0.157	-0.157	-0.348	-0.348	-0.386	-0.386	-0.386	-0.386		
	-0.230	-0.156	-0.156	-0.347	-0.347	-0.385	-0.385	-0.385	-0.385		
	-0.220	-0.155	-0.155	-0.346	-0.346	-0.384	-0.384	-0.384	-0.384		
	-0.210	-0.154	-0.154	-0.345	-0.345	-0.383	-0.383	-0.383	-0.383		
	-0.200	-0.153	-0.153	-0.344	-0.344	-0.382	-0.382	-0.382	-0.382		
	-0.190	-0.152	-0.152	-0.343	-0.343	-0.381	-0.381	-0.381	-0.381		
	-0.180	-0.151	-0.151	-0.342	-0.342	-0.380	-0.380	-0.380	-0.380		
	-0.170	-0.150	-0.150	-0.341	-0.341	-0.379	-0.379	-0.379	-0.379		
	-0.160	-0.149	-0.149	-0.340	-0.340	-0.378	-0.378	-0.378	-0.378		
	-0.150	-0.148	-0.148	-0.339	-0.339	-0.377	-0.377	-0.377	-0.377		
	-0.140	-0.147	-0.147	-0.338	-0.338	-0.376	-0.376	-0.376	-0.376		
	-0.130	-0.146	-0.146	-0.337	-0.337	-0.375	-0.375	-0.375	-0.375		
	-0.120	-0.145	-0.145	-0.336	-0.336	-0.374	-0.374	-0.374	-0.374		
	-0.110	-0.144	-0.144	-0.335	-0.335	-0.373	-0.373	-0.373	-0.373		
	-0.100	-0.143	-0.143	-0.334	-0.334	-0.372	-0.372	-0.372	-0.372		
	-0.090	-0.142	-0.142	-0.333	-0.333	-0.371	-0.371	-0.371	-0.371		
	-0.080	-0.141	-0.141	-0.332	-0.332	-0.370	-0.370	-0.370	-0.370		
	-0.070	-0.140	-0.140	-0.331	-0.331	-0.369	-0.369	-0.369	-0.369		
	-0.060	-0.139	-0.139	-0.330	-0.330	-0.368	-0.368	-0.368	-0.368		
	-0.050	-0.138	-0.138	-0.329	-0.329	-0.367	-0.367	-0.367	-0.367		
	-0.040	-0.137	-0.137	-0.328	-0.328	-0.366	-0.366	-0.366	-0.366		
	-0.030	-0.136	-0.136	-0.327	-0.327	-0.365	-0.365	-0.365	-0.365		
	-0.020	-0.135	-0.135	-0.326	-0.326	-0.364	-0.364	-0.364	-0.364		
	-0.010	-0.134	-0.134	-0.325	-0.325	-0.363	-0.363	-0.363	-0.363		
95	0.00	-0.125	-0.125	-0.315	-0.315	-0.352	-0.352	-0.352	-0.352		
	-0.361	-0.124	-0.124	-0.314	-0.314	-0.351	-0.351	-0.351	-0.351		
	-0.350	-0.123	-0.123	-0.313	-0.313	-0.350	-0.350	-0.350	-0.350		
	-0.340	-0.122	-0.122	-0.312	-0.312	-0.349	-0.349	-0.349	-0.349		
	-0.330	-0.121	-0.121	-0.311	-0.311	-0.348	-0.348	-0.348	-0.348		
	-0.320	-0.120	-0.120	-0.310	-0.310	-0.347	-0.347	-0.347	-0.347		
	-0.310	-0.119	-0.119	-0.309	-0.309	-0.346	-0.346	-0.346	-0.346		
	-0.300	-0.118	-0.118	-0.308	-0.308	-0.345	-0.345	-0.345	-0.345		
	-0.290	-0.117	-0.117	-0.307	-0.307	-0.344	-0.344	-0.344	-0.344		
	-0.280	-0.116	-0.116	-0.306	-0.306	-0.343	-0.343	-0.343	-0.343		
	-0.270	-0.115	-0.115	-0.305	-0.305	-0.342	-0.342	-0.342	-0.342		
	-0.260	-0.114	-0.114	-0.304	-0.304	-0.341	-0.341	-0.341	-0.341		
	-0.250	-0.113	-0.113	-0.303	-0.303	-0.340	-0.340	-0.340	-0.340		
	-0.240	-0.112	-0.112	-0.302	-0.302	-0.339	-0.339	-0.339	-0.339		
	-0.230	-0.111	-0.111	-0.301	-0.301	-0.338	-0.338	-0.338	-0.338		
	-0.220	-0.110	-0.110	-0.300	-0.300	-0.337	-0.337	-0.337	-0.337		
	-0.210	-0.109	-0.109	-0.299	-0.299	-0.336	-0.336	-0.336	-0.336		
	-0.200	-0.108	-0.108	-0.298	-0.298	-0.335	-0.335	-0.335	-0.335		
	-0.190	-0.107	-0.107	-0.297	-0.297	-0.334	-0.334	-0.334	-0.334		
	-0.180	-0.106	-0.106	-0.296	-0.296	-0.333	-0.333	-0.333	-0.333		
	-0.170	-0.105	-0.105	-0.295	-0.295	-0.332	-0.332	-0.332	-0.332		
	-0.160	-0.104	-0.104	-0.294	-0.294	-0.331	-0.331	-0.331	-0.331		
	-0.150	-0.103	-0.103	-0.293	-0.293	-0.330	-0.330	-0.330	-0.330		
	-0.140	-0.102	-0.102	-0.292	-0.292	-0.329	-0.329	-0.329	-0.329		
	-0.130	-0.101	-0.101	-0.291	-0.291	-0.328	-0.328	-0.328	-0.328		
	-0.120	-0.100	-0.100	-0.290	-0.290	-0.327	-0.327	-0.327	-0.327		
	-0.110	-0.099	-0.099	-0.289	-0.289	-0.326	-0.326	-0.326	-0.326		
	-0.100	-0.098	-0.098	-0.288	-0.288	-0.325	-0.325	-0.325	-0.325		
	-0.090	-0.097	-0.097	-0.287	-0.287	-0.324	-0.324	-0.324	-0.324		
	-0.080	-0.096	-0.096	-0.286	-0.286	-0.323	-0.323	-0.323	-0.323		
	-0.070	-0.095	-0.095	-0.285	-0.285	-0.322	-0.322	-0.322	-0.322		
	-0.060	-0.094	-0.094	-0.284	-0.284	-0.321	-0.321	-0.321	-0.321		
	-0.050	-0.093	-0.093	-0.283	-0.283	-0.320	-0.320	-0.320	-0.320		
	-0.040	-0.092	-0.092	-0.282	-0.282	-0.319	-0.319	-0.319	-0.319		
	-0.030	-0.091	-0.091	-0.281	-0.281	-0.318	-0.318	-0.318	-0.318		
	-0.020	-0.090	-0.090	-0.280	-0.280	-0.317	-0.317	-0.317	-0.317		
	-0.010	-0.089	-0.089	-0.279	-0.279	-0.316	-0.316	-0.316	-0.316		
95	0.00	-0.125	-0.125	-0.315	-0.315	-0.352	-0.352	-0.352	-0.352		



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TABLE V.— CONTINUED

(e) M, 0.80.

Point of interest span	Reynolds number	Angle of attack, degrees											
		-1	-2	0	2	4	6	8	10	12	14	16	
15	0.28	0.280	0.260	0.240	0.220	0.200	0.180	0.160	0.140	0.120	0.100	0.080	
14	0.28	0.280	0.260	0.240	0.220	0.200	0.180	0.160	0.140	0.120	0.100	0.080	
13	0.28	0.280	0.260	0.240	0.220	0.200	0.180	0.160	0.140	0.120	0.100	0.080	
12	0.28	0.280	0.260	0.240	0.220	0.200	0.180	0.160	0.140	0.120	0.100	0.080	
11	0.28	0.280	0.260	0.240	0.220	0.200	0.180	0.160	0.140	0.120	0.100	0.080	
10	0.28	0.280	0.260	0.240	0.220	0.200	0.180	0.160	0.140	0.120	0.100	0.080	
9	0.28	0.280	0.260	0.240	0.220	0.200	0.180	0.160	0.140	0.120	0.100	0.080	
8	0.28	0.280	0.260	0.240	0.220	0.200	0.180	0.160	0.140	0.120	0.100	0.080	
7	0.28	0.280	0.260	0.240	0.220	0.200	0.180	0.160	0.140	0.120	0.100	0.080	
6	0.28	0.280	0.260	0.240	0.220	0.200	0.180	0.160	0.140	0.120	0.100	0.080	
5	0.28	0.280	0.260	0.240	0.220	0.200	0.180	0.160	0.140	0.120	0.100	0.080	
4	0.28	0.280	0.260	0.240	0.220	0.200	0.180	0.160	0.140	0.120	0.100	0.080	
3	0.28	0.280	0.260	0.240	0.220	0.200	0.180	0.160	0.140	0.120	0.100	0.080	
2	0.28	0.280	0.260	0.240	0.220	0.200	0.180	0.160	0.140	0.120	0.100	0.080	
1	0.28	0.280	0.260	0.240	0.220	0.200	0.180	0.160	0.140	0.120	0.100	0.080	

(f) M, 0.82.

Point of interest span	Reynolds number	Angle of attack, degrees											
		-1	-2	0	2	4	6	8	10	12	14	16	
15	0.10	0.100	0.090	0.080	0.070	0.060	0.050	0.040	0.030	0.020	0.010	0.000	
14	0.10	0.100	0.090	0.080	0.070	0.060	0.050	0.040	0.030	0.020	0.010	0.000	
13	0.10	0.100	0.090	0.080	0.070	0.060	0.050	0.040	0.030	0.020	0.010	0.000	
12	0.10	0.100	0.090	0.080	0.070	0.060	0.050	0.040	0.030	0.020	0.010	0.000	
11	0.10	0.100	0.090	0.080	0.070	0.060	0.050	0.040	0.030	0.020	0.010	0.000	
10	0.10	0.100	0.090	0.080	0.070	0.060	0.050	0.040	0.030	0.020	0.010	0.000	
9	0.10	0.100	0.090	0.080	0.070	0.060	0.050	0.040	0.030	0.020	0.010	0.000	
8	0.10	0.100	0.090	0.080	0.070	0.060	0.050	0.040	0.030	0.020	0.010	0.000	
7	0.10	0.100	0.090	0.080	0.070	0.060	0.050	0.040	0.030	0.020	0.010	0.000	
6	0.10	0.100	0.090	0.080	0.070	0.060	0.050	0.040	0.030	0.020	0.010	0.000	
5	0.10	0.100	0.090	0.080	0.070	0.060	0.050	0.040	0.030	0.020	0.010	0.000	
4	0.10	0.100	0.090	0.080	0.070	0.060	0.050	0.040	0.030	0.020	0.010	0.000	
3	0.10	0.100	0.090	0.080	0.070	0.060	0.050	0.040	0.030	0.020	0.010	0.000	
2	0.10	0.100	0.090	0.080	0.070	0.060	0.050	0.040	0.030	0.020	0.010	0.000	
1	0.10	0.100	0.090	0.080	0.070	0.060	0.050	0.040	0.030	0.020	0.010	0.000	

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TABLE V.—CONTINUED

(g) M, 0.84.

(h) M, 0.86.

Per- cent span	Per- cent chord	Angle of attack, degrees											
		-1		-4		0		2		4		6	
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
15	0	-0.18	-0.20	-0.20	-0.20	-0.18	-0.18	-0.15	-0.15	-0.10	-0.10	-0.04	-0.04
		-0.12	-0.15	-0.17	-0.19	-0.12	-0.15	-0.12	-0.15	-0.09	-0.10	-0.03	-0.03
		-0.08	-0.10	-0.12	-0.14	-0.08	-0.10	-0.08	-0.10	-0.05	-0.06	-0.02	-0.02
		-0.05	-0.06	-0.07	-0.08	-0.05	-0.06	-0.05	-0.06	-0.03	-0.04	-0.01	-0.01
		-0.03	-0.03	-0.04	-0.04	-0.03	-0.03	-0.03	-0.03	-0.02	-0.02	-0.00	-0.00
	25	-0.10	-0.12	-0.14	-0.16	-0.10	-0.12	-0.10	-0.12	-0.08	-0.10	-0.04	-0.04
		-0.06	-0.08	-0.10	-0.12	-0.06	-0.08	-0.06	-0.08	-0.04	-0.06	-0.02	-0.02
		-0.04	-0.05	-0.06	-0.07	-0.04	-0.05	-0.04	-0.05	-0.03	-0.04	-0.01	-0.01
		-0.03	-0.03	-0.04	-0.04	-0.03	-0.03	-0.03	-0.03	-0.02	-0.02	-0.00	-0.00
		-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01	-0.00	-0.00
35	0	-0.11	-0.12	-0.13	-0.14	-0.11	-0.12	-0.10	-0.12	-0.07	-0.08	-0.03	-0.03
		-0.07	-0.08	-0.09	-0.10	-0.07	-0.08	-0.07	-0.08	-0.05	-0.06	-0.02	-0.02
		-0.05	-0.06	-0.07	-0.08	-0.05	-0.06	-0.05	-0.06	-0.04	-0.05	-0.01	-0.01
		-0.04	-0.04	-0.05	-0.05	-0.04	-0.04	-0.04	-0.04	-0.03	-0.03	-0.00	-0.00
		-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.02	-0.00	-0.00
	25	-0.08	-0.09	-0.10	-0.11	-0.08	-0.09	-0.08	-0.09	-0.06	-0.07	-0.03	-0.03
		-0.06	-0.07	-0.08	-0.09	-0.06	-0.07	-0.06	-0.07	-0.05	-0.06	-0.02	-0.02
		-0.05	-0.05	-0.06	-0.07	-0.05	-0.05	-0.05	-0.06	-0.04	-0.05	-0.01	-0.01
		-0.04	-0.04	-0.05	-0.05	-0.04	-0.04	-0.04	-0.05	-0.03	-0.04	-0.00	-0.00
		-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.02	-0.02	-0.00	-0.00
45	0	-0.05	-0.06	-0.07	-0.08	-0.05	-0.06	-0.05	-0.06	-0.04	-0.05	-0.02	-0.02
		-0.04	-0.05	-0.06	-0.07	-0.04	-0.05	-0.04	-0.05	-0.03	-0.04	-0.01	-0.01
		-0.03	-0.03	-0.04	-0.05	-0.03	-0.03	-0.03	-0.04	-0.02	-0.03	-0.00	-0.00
		-0.02	-0.02	-0.03	-0.03	-0.02	-0.02	-0.02	-0.03	-0.01	-0.02	-0.00	-0.00
		-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.00	-0.01	-0.00	-0.00
	25	-0.04	-0.05	-0.06	-0.07	-0.04	-0.05	-0.04	-0.05	-0.03	-0.04	-0.01	-0.01
		-0.03	-0.04	-0.05	-0.06	-0.03	-0.04	-0.03	-0.04	-0.02	-0.03	-0.00	-0.00
		-0.02	-0.02	-0.03	-0.03	-0.02	-0.02	-0.02	-0.03	-0.01	-0.02	-0.00	-0.00
		-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	-0.00	-0.01	-0.00	-0.00
		-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005	-0.002	-0.003	-0.001	-0.001
55	0	-0.02	-0.03	-0.04	-0.05	-0.02	-0.03	-0.02	-0.03	-0.01	-0.02	-0.005	-0.005
		-0.015	-0.02	-0.03	-0.04	-0.015	-0.02	-0.015	-0.02	-0.008	-0.01	-0.003	-0.003
		-0.01	-0.015	-0.02	-0.03	-0.01	-0.015	-0.01	-0.015	-0.006	-0.008	-0.002	-0.002
		-0.008	-0.008	-0.01	-0.015	-0.008	-0.01	-0.008	-0.01	-0.004	-0.006	-0.001	-0.001
		-0.005	-0.005	-0.006	-0.008	-0.005	-0.006	-0.005	-0.008	-0.002	-0.004	-0.0005	-0.0005
	25	-0.01	-0.015	-0.02	-0.03	-0.01	-0.015	-0.01	-0.015	-0.005	-0.008	-0.002	-0.002
		-0.008	-0.008	-0.01	-0.02	-0.008	-0.01	-0.008	-0.01	-0.004	-0.006	-0.001	-0.001
		-0.005	-0.005	-0.006	-0.008	-0.005	-0.006	-0.005	-0.008	-0.002	-0.004	-0.0005	-0.0005
		-0.003	-0.003	-0.004	-0.005	-0.003	-0.004	-0.003	-0.005	-0.001	-0.002	-0.0005	-0.0005
		-0.001	-0.001	-0.002	-0.003	-0.001	-0.002	-0.001	-0.003	-0.0005	-0.001	-0.0002	-0.0002
65	0	-0.01	-0.015	-0.02	-0.03	-0.01	-0.015	-0.01	-0.015	-0.005	-0.008	-0.002	-0.002
		-0.008	-0.008	-0.01	-0.02	-0.008	-0.01	-0.008	-0.01	-0.004	-0.006	-0.001	-0.001
		-0.005	-0.005	-0.006	-0.008	-0.005	-0.006	-0.005	-0.008	-0.002	-0.004	-0.0005	-0.0005
		-0.003	-0.003	-0.004	-0.005	-0.003	-0.004	-0.003	-0.005	-0.001	-0.002	-0.0005	-0.0005
		-0.001	-0.001	-0.002	-0.003	-0.001	-0.002	-0.001	-0.003	-0.0005	-0.001	-0.0002	-0.0002
	25	-0.005	-0.008	-0.01	-0.02	-0.005	-0.008	-0.005	-0.01	-0.002	-0.005	-0.001	-0.001
		-0.003	-0.003	-0.004	-0.006	-0.003	-0.004	-0.003	-0.006	-0.001	-0.003	-0.0005	-0.0005
		-0.002	-0.002	-0.003	-0.004	-0.002	-0.003	-0.002	-0.004	-0.0005	-0.001	-0.0002	-0.0002
		-0.001	-0.001	-0.002	-0.003	-0.001	-0.002	-0.001	-0.003	-0.0005	-0.001	-0.0002	-0.0002
		-0.0005	-0.0005	-0.001	-0.002	-0.0005	-0.001	-0.0005	-0.002	-0.0002	-0.0005	-0.0001	-0.0001
75	0	-0.002	-0.005	-0.008	-0.01	-0.002	-0.005	-0.002	-0.005	-0.001	-0.002	-0.0005	-0.0005
		-0.001	-0.001	-0.002	-0.004	-0.001	-0.002	-0.001	-0.004	-0.0005	-0.001	-0.0002	-0.0002
		-0.0008	-0.0008	-0.001	-0.002	-0.0008	-0.001	-0.0008	-0.002	-0.0005	-0.0008	-0.0002	-0.0002
		-0.0005	-0.0005	-0.0008	-0.001	-0.0005	-0.0008	-0.0005	-0.001	-0.0002	-0.0005	-0.0001	-0.0001
		-0.0003	-0.0003	-0.0005	-0.0008	-0.0003	-0.0005	-0.0003	-0.0008	-0.0002	-0.0003	-0.0001	-0.0001
	25	-0.001	-0.002	-0.003	-0.004	-0.001	-0.002	-0.001	-0.003	-0.0005	-0.001	-0.0002	-0.0002
		-0.0008	-0.0008	-0.001	-0.002	-0.0008	-0.001	-0.0008	-0.002	-0.0005	-0.0008	-0.0002	-0.0002
		-0.0005	-0.0005	-0.0008	-0.001	-0.0005	-0.0008	-0.0005	-0.001	-0.0002	-0.0005	-0.0001	-0.0001
		-0.0003	-0.0003	-0.0005	-0.0008	-0.0003	-0.0005	-0.0003	-0.0008	-0.0002	-0.0003	-0.0001	-0.0001
		-0.0001	-0.0001	-0.0002	-0.0004	-0.0001	-0.0002	-0.0001	-0.0004	-0.0001	-0.0002	-0.00005	-0.00005
85	0	-0.0005	-0.0008	-0.001	-0.001	-0.0005	-0.0008	-0.0005	-0.001	-0.0002	-0.0005	-0.0001	-0.0001
		-0.0003	-0.0003	-0.0005	-0.0008	-0.0003	-0.0005	-0.0003	-0.0008	-0.0002	-0.0003	-0.0001	-0.0001
		-0.0002	-0.0002	-0.0003	-0.0004	-0.0002	-0.0003	-0.0002	-0.0004	-0.0001	-0.0002	-0.00005	-0.00005
		-0.0001	-0.0001	-0.0002	-0.0003	-0.0001	-0.0002	-0.0001	-0.0003	-0.0001	-0.0002	-0.00005	-0.00005
		-0.00005	-0.00005	-0.0001	-0.0002	-0.00005	-0.0001	-0.00005	-0.0002	-0.00005	-0.0001	-0.00002	-0.00002
	25	-0.0002	-0.0002	-0.0003	-0.0003	-0.0002	-0.0003	-0.0002	-0.0003	-0.0001	-0.0002	-0.00005	-0.00005
		-0.0001	-0.0001	-0.0002	-0.0002	-0.0001	-0.0002	-0.0001	-0.0002	-0.0001	-0.0002	-0.00005	-0.00005
		-0.00005	-0.00005	-0.0001	-0.0001	-0.00005	-0.0001	-0.00005	-0.0001	-0.00005	-0.0001	-0.00002	-0.00002
		-0.00002	-0.00002	-0.00005	-0.00005	-0.00002	-0.00005	-0.00002	-0.00005	-0.00002	-0.00005	-0.00001	-0.00001
		-0.00001	-0.00001	-0.00002	-0.00002	-0.00001	-0.00002	-0.00001	-0.00002	-0.00001	-0.00002	-0.000005	-0.000005

NACA

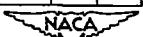
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TABLE V.—CONTINUED

(i) M,0.88.

(j) M,0.90.

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TABLE V.— CONCLUDED

(k) M, 0.92.

Per-	Per-	Angle of attack, degrees												
		1	2	3	4	5	6	7	8	9	10	11	12	
cent	cent	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	
15	e	-0.205	-	-0.295	-	-0.385	-	-0.465	-	-0.545	-	-0.630	-	0.300
		-0.116	-0.130	-0.070	-0.090	-0.030	-0.050	-0.010	-0.030	-0.005	-0.020	-0.040	-0.060	0.140
		-0.116	-0.130	-0.070	-0.090	-0.030	-0.050	-0.010	-0.030	-0.005	-0.020	-0.040	-0.060	0.140
		-0.116	-0.130	-0.070	-0.090	-0.030	-0.050	-0.010	-0.030	-0.005	-0.020	-0.040	-0.060	0.140
		-0.105	-0.120	-0.065	-0.080	-0.025	-0.045	-0.005	-0.025	-0.005	-0.015	-0.030	-0.050	0.130
		-0.095	-0.115	-0.055	-0.075	-0.020	-0.035	-0.005	-0.020	-0.005	-0.010	-0.025	-0.045	0.130
19	e	-0.12	-	-0.175	-	-0.235	-	-0.295	-	-0.355	-	-0.415	-	0.350
		-0.095	-0.105	-0.065	-0.075	-0.025	-0.035	-0.015	-0.025	-0.005	-0.015	-0.025	-0.035	0.190
		-0.095	-0.105	-0.065	-0.075	-0.025	-0.035	-0.015	-0.025	-0.005	-0.015	-0.025	-0.035	0.190
		-0.095	-0.105	-0.065	-0.075	-0.025	-0.035	-0.015	-0.025	-0.005	-0.015	-0.025	-0.035	0.190
		-0.075	-0.085	-0.055	-0.065	-0.020	-0.030	-0.010	-0.020	-0.005	-0.010	-0.020	-0.030	0.150
		-0.075	-0.085	-0.055	-0.065	-0.020	-0.030	-0.010	-0.020	-0.005	-0.010	-0.020	-0.030	0.150
21	e	-0.10	-	-0.160	-	-0.240	-	-0.320	-	-0.400	-	-0.480	-	0.400
		-0.075	-0.085	-0.055	-0.065	-0.025	-0.035	-0.015	-0.025	-0.005	-0.015	-0.025	-0.035	0.250
		-0.075	-0.085	-0.055	-0.065	-0.025	-0.035	-0.015	-0.025	-0.005	-0.015	-0.025	-0.035	0.250
		-0.075	-0.085	-0.055	-0.065	-0.025	-0.035	-0.015	-0.025	-0.005	-0.015	-0.025	-0.035	0.250
		-0.065	-0.075	-0.050	-0.060	-0.020	-0.030	-0.010	-0.020	-0.005	-0.010	-0.020	-0.030	0.250
		-0.065	-0.075	-0.050	-0.060	-0.020	-0.030	-0.010	-0.020	-0.005	-0.010	-0.020	-0.030	0.250
15	e	-0.085	-	-0.155	-	-0.235	-	-0.315	-	-0.395	-	-0.475	-	0.350
		-0.065	-0.075	-0.050	-0.060	-0.020	-0.030	-0.010	-0.020	-0.005	-0.010	-0.020	-0.030	0.250
		-0.065	-0.075	-0.050	-0.060	-0.020	-0.030	-0.010	-0.020	-0.005	-0.010	-0.020	-0.030	0.250
		-0.065	-0.075	-0.050	-0.060	-0.020	-0.030	-0.010	-0.020	-0.005	-0.010	-0.020	-0.030	0.250
		-0.055	-0.065	-0.040	-0.050	-0.015	-0.025	-0.005	-0.015	-0.005	-0.010	-0.020	-0.030	0.250
		-0.055	-0.065	-0.040	-0.050	-0.015	-0.025	-0.005	-0.015	-0.005	-0.010	-0.020	-0.030	0.250
25	e	-0.11	-	-0.165	-	-0.245	-	-0.325	-	-0.405	-	-0.485	-	0.350
		-0.095	-0.105	-0.065	-0.075	-0.025	-0.035	-0.015	-0.025	-0.005	-0.015	-0.025	-0.035	0.250
		-0.095	-0.105	-0.065	-0.075	-0.025	-0.035	-0.015	-0.025	-0.005	-0.015	-0.025	-0.035	0.250
		-0.095	-0.105	-0.065	-0.075	-0.025	-0.035	-0.015	-0.025	-0.005	-0.015	-0.025	-0.035	0.250
		-0.085	-0.095	-0.050	-0.060	-0.020	-0.030	-0.010	-0.020	-0.005	-0.010	-0.020	-0.030	0.250
		-0.085	-0.095	-0.050	-0.060	-0.020	-0.030	-0.010	-0.020	-0.005	-0.010	-0.020	-0.030	0.250

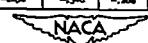
(1) M.C.94.

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TABLE VI.—PRESSURE COEFFICIENTS ON A WING HAVING A SWEEPBACK ANGLE OF 35° AND AN ASPECT RATIO OF 6 IN COMBINATION WITH A FUSELAGE.

(a) M,0.40.



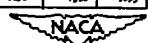
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TABLE VI.—CONTINUED

(b) M,0.60.

Par- tial span	Re- lief point	Angle of attack, degrees									
		6		10		12		14		16	
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
M-3	30	-0.205	-0.205	-0.196	-0.196	-0.177	-0.177	-0.158	-0.158	-0.139	-0.139
		-0.198	-0.198	-0.189	-0.189	-0.170	-0.170	-0.151	-0.151	-0.132	-0.132
		-0.170	-0.170	-0.161	-0.161	-0.142	-0.142	-0.123	-0.123	-0.104	-0.104
		-0.148	-0.148	-0.139	-0.139	-0.120	-0.120	-0.101	-0.101	-0.082	-0.082
		-0.131	-0.131	-0.122	-0.122	-0.103	-0.103	-0.084	-0.084	-0.065	-0.065
		-0.111	-0.111	-0.102	-0.102	-0.083	-0.083	-0.064	-0.064	-0.045	-0.045
	35	-0.713	-0.713	-0.704	-0.704	-0.685	-0.685	-0.666	-0.666	-0.647	-0.647
		-0.694	-0.694	-0.685	-0.685	-0.666	-0.666	-0.647	-0.647	-0.628	-0.628
		-0.675	-0.675	-0.666	-0.666	-0.647	-0.647	-0.628	-0.628	-0.609	-0.609
		-0.656	-0.656	-0.647	-0.647	-0.628	-0.628	-0.609	-0.609	-0.590	-0.590
		-0.636	-0.636	-0.627	-0.627	-0.608	-0.608	-0.589	-0.589	-0.570	-0.570
		-0.616	-0.616	-0.607	-0.607	-0.588	-0.588	-0.569	-0.569	-0.550	-0.550
37	30	-0.308	-0.308	-0.300	-0.300	-0.281	-0.281	-0.262	-0.262	-0.243	-0.243
		-0.289	-0.289	-0.281	-0.281	-0.262	-0.262	-0.243	-0.243	-0.224	-0.224
		-0.270	-0.270	-0.262	-0.262	-0.243	-0.243	-0.224	-0.224	-0.205	-0.205
	35	-0.385	-0.385	-0.377	-0.377	-0.358	-0.358	-0.339	-0.339	-0.320	-0.320
		-0.366	-0.366	-0.358	-0.358	-0.339	-0.339	-0.320	-0.320	-0.301	-0.301
		-0.347	-0.347	-0.339	-0.339	-0.320	-0.320	-0.301	-0.301	-0.282	-0.282
38	30	-0.375	-0.375	-0.367	-0.367	-0.348	-0.348	-0.329	-0.329	-0.310	-0.310
		-0.356	-0.356	-0.348	-0.348	-0.329	-0.329	-0.310	-0.310	-0.291	-0.291
		-0.337	-0.337	-0.329	-0.329	-0.310	-0.310	-0.291	-0.291	-0.272	-0.272
	35	-0.452	-0.452	-0.444	-0.444	-0.425	-0.425	-0.406	-0.406	-0.387	-0.387
		-0.433	-0.433	-0.425	-0.425	-0.406	-0.406	-0.387	-0.387	-0.368	-0.368
		-0.414	-0.414	-0.406	-0.406	-0.387	-0.387	-0.368	-0.368	-0.349	-0.349

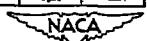


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TABLE VI.—CONTINUED

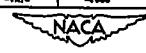
(c) M, O.70.



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TABLE VI.—CONTINUED

(d) M, 0.75.



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TABLE VI.— CONTINUED

(e) M,0.80.

Pertinent data	Pertinent data	Angle of attack, degrees											
		-1		-4		0		2		4		6	
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
M.5		-0.10		0.011		0.295		0.700		0.750		0.800	
	13	-0.20		0.101		0.475		0.845		0.895		0.945	
	25	-0.30		0.191		0.755		1.125		1.175		1.225	
	37	-0.40		0.281		0.755		1.125		1.175		1.225	
	50	-0.50		0.371		0.755		1.125		1.175		1.225	
	62	-0.60		0.461		0.755		1.125		1.175		1.225	
	75	-0.70		0.551		0.755		1.125		1.175		1.225	
	87	-0.80		0.641		0.755		1.125		1.175		1.225	
	100	-0.90		0.731		0.755		1.125		1.175		1.225	
	112	-1.00		0.821		0.755		1.125		1.175		1.225	
	125	-1.10		0.911		0.755		1.125		1.175		1.225	
	137	-1.20		1.001		0.755		1.125		1.175		1.225	
	150	-1.30		1.091		0.755		1.125		1.175		1.225	
	162	-1.40		1.181		0.755		1.125		1.175		1.225	
	175	-1.50		1.271		0.755		1.125		1.175		1.225	
	187	-1.60		1.361		0.755		1.125		1.175		1.225	
	200	-1.70		1.451		0.755		1.125		1.175		1.225	
	212	-1.80		1.541		0.755		1.125		1.175		1.225	
	225	-1.90		1.631		0.755		1.125		1.175		1.225	
	237	-2.00		1.721		0.755		1.125		1.175		1.225	
	250	-2.10		1.811		0.755		1.125		1.175		1.225	
	262	-2.20		1.901		0.755		1.125		1.175		1.225	
	275	-2.30		1.991		0.755		1.125		1.175		1.225	
	287	-2.40		2.081		0.755		1.125		1.175		1.225	
	300	-2.50		2.171		0.755		1.125		1.175		1.225	
	312	-2.60		2.261		0.755		1.125		1.175		1.225	
	325	-2.70		2.351		0.755		1.125		1.175		1.225	
	337	-2.80		2.441		0.755		1.125		1.175		1.225	
	350	-2.90		2.531		0.755		1.125		1.175		1.225	
	362	-3.00		2.621		0.755		1.125		1.175		1.225	
	375	-3.10		2.711		0.755		1.125		1.175		1.225	
	387	-3.20		2.801		0.755		1.125		1.175		1.225	
	400	-3.30		2.891		0.755		1.125		1.175		1.225	
	412	-3.40		2.981		0.755		1.125		1.175		1.225	
	425	-3.50		3.071		0.755		1.125		1.175		1.225	
	437	-3.60		3.161		0.755		1.125		1.175		1.225	
	450	-3.70		3.251		0.755		1.125		1.175		1.225	
	462	-3.80		3.341		0.755		1.125		1.175		1.225	
	475	-3.90		3.431		0.755		1.125		1.175		1.225	
	487	-4.00		3.521		0.755		1.125		1.175		1.225	
	500	-4.10		3.611		0.755		1.125		1.175		1.225	
	512	-4.20		3.701		0.755		1.125		1.175		1.225	
	525	-4.30		3.791		0.755		1.125		1.175		1.225	
	537	-4.40		3.881		0.755		1.125		1.175		1.225	
	550	-4.50		3.971		0.755		1.125		1.175		1.225	
	562	-4.60		4.061		0.755		1.125		1.175		1.225	
	575	-4.70		4.151		0.755		1.125		1.175		1.225	
	587	-4.80		4.241		0.755		1.125		1.175		1.225	
	600	-4.90		4.331		0.755		1.125		1.175		1.225	
	612	-5.00		4.421		0.755		1.125		1.175		1.225	
	625	-5.10		4.511		0.755		1.125		1.175		1.225	
	637	-5.20		4.601		0.755		1.125		1.175		1.225	
	650	-5.30		4.691		0.755		1.125		1.175		1.225	
	662	-5.40		4.781		0.755		1.125		1.175		1.225	
	675	-5.50		4.871		0.755		1.125		1.175		1.225	
	687	-5.60		4.961		0.755		1.125		1.175		1.225	
	700	-5.70		5.051		0.755		1.125		1.175		1.225	
	712	-5.80		5.141		0.755		1.125		1.175		1.225	
	725	-5.90		5.231		0.755		1.125		1.175		1.225	
	737	-6.00		5.321		0.755		1.125		1.175		1.225	
	750	-6.10		5.411		0.755		1.125		1.175		1.225	
	762	-6.20		5.501		0.755		1.125		1.175		1.225	
	775	-6.30		5.591		0.755		1.125		1.175		1.225	
	787	-6.40		5.681		0.755		1.125		1.175		1.225	
	800	-6.50		5.771		0.755		1.125		1.175		1.225	
	812	-6.60		5.861		0.755		1.125		1.175		1.225	
	825	-6.70		5.951		0.755		1.125		1.175		1.225	
	837	-6.80		6.041		0.755		1.125		1.175		1.225	
	850	-6.90		6.131		0.755		1.125		1.175		1.225	
	862	-7.00		6.221		0.755		1.125		1.175		1.225	
	875	-7.10		6.311		0.755		1.125		1.175		1.225	
	887	-7.20		6.401		0.755		1.125		1.175		1.225	
	900	-7.30		6.491		0.755		1.125		1.175		1.225	
	912	-7.40		6.581		0.755		1.125		1.175		1.225	
	925	-7.50		6.671		0.755		1.125		1.175		1.225	
	937	-7.60		6.761		0.755		1.125		1.175		1.225	
	950	-7.70		6.851		0.755		1.125		1.175		1.225	
	962	-7.80		6.941		0.755		1.125		1.175		1.225	
	975	-7.90		7.031		0.755		1.125		1.175		1.225	
	987	-8.00		7.121		0.755		1.125		1.175		1.225	
	1000	-8.10		7.211		0.755		1.125		1.175		1.225	

(f) M,0.82.

Pertinent data	Pertinent data	Angle of attack, degrees											
		-1		-4		0		2		4		6	
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
M.5		-0.10		0.011		0.295		0.700		0.750		0.800	
	13	-0.20		0.101		0.475		0.845		0.895		0.945	
	25	-0.30		0.191		0.755		1.125		1.175		1.225	
	37	-0.40		0.281		0.755		1.125		1.175		1.225	
	50	-0.50		0.371		0.755		1.125		1.175		1.225	
	62	-0.60		0.461		0.755		1.125		1.175		1.225	
	75	-0.70		0.551		0.755		1.125		1.175		1.225	
	87	-0.80		0.641		0.755		1.125		1.175		1.225	
	100	-0.90		0.731		0.755		1.125		1.175		1.225	
	112	-1.00		0.821		0.755		1.125		1.175		1.225	
	125	-1.10		0.911		0.755		1.125		1.175		1.225	
	137	-1.20		1.001		0.755		1.125		1.175		1.225	
	150	-1.30		1.091		0.755		1.125		1.175		1.225	
	162	-1.40		1.181		0.755		1.125		1.175		1.225	
	175	-1.50		1.271		0.755		1.125		1.175		1.225	
	187	-1.60		1.361		0.755		1.125		1.175		1.225	
	200	-1.70		1.451		0.755		1.125		1.175			

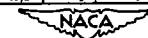
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TABLE VI.—CONTINUED

(g) M, 0.84.

Par-	Per-	Angle of attack, degrees											
		-1		-4		0°		4		8		12	
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
15.5	35	-0.25	--	0.305	--	0.615	--	0.765	--	0.865	--	0.925	--
		-0.20	--	0.255	--	0.505	--	0.655	--	0.755	--	0.825	--
		-0.15	--	0.210	-0.025	0.455	-0.045	0.605	-0.055	0.705	-0.065	0.775	-0.075
		-0.10	--	0.165	-0.085	0.395	-0.095	0.545	-0.105	0.645	-0.115	0.715	-0.125
		-0.05	--	0.120	-0.125	0.330	-0.135	0.480	-0.145	0.580	-0.155	0.650	-0.165
		-0.025	--	0.095	-0.165	0.285	-0.175	0.435	-0.185	0.535	-0.195	0.605	-0.205
		-0.015	--	0.085	-0.185	0.275	-0.195	0.425	-0.205	0.525	-0.215	0.595	-0.225
		-0.005	--	0.075	-0.205	0.265	-0.215	0.415	-0.225	0.515	-0.235	0.585	-0.245
		-0.0025	--	0.072	-0.215	0.262	-0.225	0.412	-0.235	0.512	-0.245	0.582	-0.252
		-0.0015	--	0.070	-0.225	0.260	-0.235	0.410	-0.245	0.508	-0.255	0.578	-0.268
25	35	-0.25	--	0.285	--	0.585	--	0.735	--	0.835	--	0.905	--
		-0.20	--	0.235	-0.135	0.485	-0.145	0.635	-0.155	0.735	-0.165	0.805	-0.175
		-0.15	--	0.185	-0.185	0.385	-0.195	0.535	-0.205	0.635	-0.215	0.705	-0.225
		-0.10	--	0.145	-0.235	0.285	-0.245	0.435	-0.255	0.535	-0.265	0.605	-0.275
		-0.05	--	0.105	-0.285	0.185	-0.295	0.335	-0.305	0.435	-0.315	0.505	-0.325
		-0.025	--	0.085	-0.305	0.165	-0.315	0.315	-0.325	0.415	-0.335	0.485	-0.345
		-0.015	--	0.080	-0.315	0.160	-0.325	0.310	-0.335	0.410	-0.345	0.480	-0.355
		-0.005	--	0.075	-0.325	0.155	-0.335	0.305	-0.345	0.405	-0.355	0.475	-0.365
		-0.0025	--	0.072	-0.335	0.152	-0.345	0.302	-0.355	0.402	-0.365	0.472	-0.375
		-0.0015	--	0.070	-0.345	0.150	-0.355	0.300	-0.365	0.400	-0.375	0.470	-0.385
35	35	-0.25	--	0.315	--	0.615	--	0.765	--	0.865	--	0.925	--
		-0.20	--	0.265	-0.075	0.515	-0.085	0.665	-0.095	0.765	-0.105	0.835	-0.115
		-0.15	--	0.215	-0.125	0.415	-0.135	0.565	-0.145	0.665	-0.155	0.735	-0.165
		-0.10	--	0.165	-0.175	0.315	-0.185	0.465	-0.195	0.565	-0.205	0.635	-0.215
		-0.05	--	0.125	-0.225	0.215	-0.235	0.365	-0.245	0.465	-0.255	0.535	-0.265
		-0.025	--	0.105	-0.245	0.185	-0.255	0.335	-0.265	0.435	-0.275	0.505	-0.285
		-0.015	--	0.100	-0.255	0.180	-0.265	0.330	-0.275	0.430	-0.285	0.495	-0.295
		-0.005	--	0.095	-0.265	0.175	-0.275	0.325	-0.285	0.425	-0.295	0.485	-0.305
		-0.0025	--	0.092	-0.275	0.172	-0.285	0.322	-0.295	0.422	-0.305	0.482	-0.315
		-0.0015	--	0.090	-0.285	0.170	-0.295	0.320	-0.305	0.420	-0.315	0.480	-0.325
45	35	-0.25	--	0.345	--	0.645	--	0.795	--	0.895	--	0.955	--
		-0.20	--	0.295	-0.115	0.545	-0.125	0.695	-0.135	0.795	-0.145	0.865	-0.155
		-0.15	--	0.245	-0.165	0.445	-0.175	0.595	-0.185	0.695	-0.195	0.765	-0.205
		-0.10	--	0.195	-0.215	0.345	-0.225	0.495	-0.235	0.595	-0.245	0.665	-0.255
		-0.05	--	0.155	-0.265	0.245	-0.275	0.395	-0.285	0.495	-0.295	0.565	-0.305
		-0.025	--	0.135	-0.285	0.215	-0.295	0.365	-0.305	0.465	-0.315	0.535	-0.325
		-0.015	--	0.130	-0.295	0.210	-0.305	0.370	-0.315	0.470	-0.325	0.540	-0.335
		-0.005	--	0.125	-0.305	0.205	-0.315	0.365	-0.325	0.465	-0.335	0.535	-0.345
		-0.0025	--	0.122	-0.315	0.202	-0.325	0.362	-0.335	0.462	-0.345	0.532	-0.355
		-0.0015	--	0.120	-0.325	0.200	-0.335	0.360	-0.345	0.460	-0.355	0.530	-0.365

(h) M, 0.86.



COMPETENTIA.

TABLE VI.—CONTINUED

(1) M, 0.88.

(j) M, 0.90.

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NACA RM A50J26a

TABLE VI.— CONCLUDED

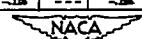
(k) M, 0.92.

(1) M, 0.94.

~~CONFIDENTIAL~~

TABLE VII.—PRESSURE COEFFICIENTS OF 45° AND AN ASPECT RATIO OF 6 ON A WING HAVING A SWEEPBACK ANGLE IN COMBINATION WITH A FUSELAGE.

(a) M,0.40.



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NACA RM A50J26a

TABLE VII.— CONTINUED

(b) M, 0.60.

Per cent semi-span	Per cent chord	Angle of attack, degrees											
		-4		0		2		4		6		8	
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
18.5	0	0.000	---	0.117	---	0.205	---	0.275	---	0.330	---	0.375	---
	-0.125	---	0.045	-0.117	-0.205	-0.275	-0.330	-0.375	-0.417	-0.467	-0.500	-0.533	-0.556
	-0.250	---	0.093	-0.167	-0.250	-0.325	-0.383	-0.433	-0.475	-0.517	-0.550	-0.573	-0.593
	-0.375	---	0.125	-0.205	-0.283	-0.350	-0.408	-0.453	-0.495	-0.533	-0.563	-0.583	-0.600
	-0.500	---	0.150	-0.250	-0.325	-0.393	-0.443	-0.483	-0.520	-0.553	-0.580	-0.600	-0.613
	-0.625	---	0.173	-0.275	-0.350	-0.417	-0.467	-0.500	-0.533	-0.563	-0.587	-0.600	-0.613
	-0.750	---	0.193	-0.300	-0.375	-0.443	-0.493	-0.525	-0.553	-0.580	-0.603	-0.617	-0.630
	-0.875	---	0.210	-0.325	-0.400	-0.467	-0.513	-0.543	-0.570	-0.597	-0.617	-0.630	-0.643
	-1.000	---	0.223	-0.343	-0.417	-0.483	-0.533	-0.563	-0.590	-0.617	-0.633	-0.643	-0.653
	-1.125	---	0.233	-0.353	-0.423	-0.493	-0.543	-0.573	-0.600	-0.627	-0.643	-0.653	-0.663
35	0	0.000	---	0.100	---	0.187	---	0.263	---	0.325	---	0.383	---
	-0.125	---	0.045	-0.100	-0.187	-0.263	-0.325	-0.383	-0.433	-0.483	-0.525	-0.563	-0.593
	-0.250	---	0.083	-0.167	-0.250	-0.325	-0.383	-0.433	-0.483	-0.533	-0.563	-0.593	-0.613
	-0.375	---	0.117	-0.205	-0.283	-0.350	-0.408	-0.453	-0.500	-0.543	-0.573	-0.600	-0.623
	-0.500	---	0.143	-0.250	-0.325	-0.393	-0.443	-0.493	-0.533	-0.573	-0.600	-0.623	-0.643
	-0.625	---	0.163	-0.275	-0.350	-0.417	-0.467	-0.500	-0.543	-0.580	-0.603	-0.623	-0.643
	-0.750	---	0.183	-0.300	-0.375	-0.443	-0.493	-0.525	-0.563	-0.600	-0.623	-0.643	-0.663
	-0.875	---	0.200	-0.325	-0.400	-0.467	-0.513	-0.543	-0.570	-0.603	-0.623	-0.643	-0.663
	-1.000	---	0.213	-0.343	-0.417	-0.483	-0.533	-0.563	-0.600	-0.627	-0.643	-0.663	-0.683
	-1.125	---	0.223	-0.353	-0.423	-0.493	-0.543	-0.573	-0.600	-0.627	-0.643	-0.663	-0.683
75	0	0.000	---	0.093	---	0.173	---	0.250	---	0.317	---	0.383	---
	-0.125	---	0.045	-0.100	-0.173	-0.250	-0.317	-0.383	-0.433	-0.483	-0.525	-0.563	-0.593
	-0.250	---	0.083	-0.167	-0.250	-0.325	-0.383	-0.433	-0.483	-0.533	-0.563	-0.593	-0.613
	-0.375	---	0.117	-0.205	-0.283	-0.350	-0.408	-0.453	-0.500	-0.543	-0.573	-0.600	-0.623
	-0.500	---	0.143	-0.250	-0.325	-0.393	-0.443	-0.493	-0.533	-0.573	-0.600	-0.623	-0.643
	-0.625	---	0.163	-0.275	-0.350	-0.417	-0.467	-0.500	-0.543	-0.580	-0.603	-0.623	-0.643
	-0.750	---	0.183	-0.300	-0.375	-0.443	-0.493	-0.525	-0.563	-0.600	-0.623	-0.643	-0.663
	-0.875	---	0.200	-0.325	-0.400	-0.467	-0.513	-0.543	-0.570	-0.603	-0.623	-0.643	-0.663
	-1.000	---	0.213	-0.343	-0.417	-0.483	-0.533	-0.563	-0.600	-0.627	-0.643	-0.663	-0.683
	-1.125	---	0.223	-0.353	-0.423	-0.493	-0.543	-0.573	-0.600	-0.627	-0.643	-0.663	-0.683
95	0	0.000	---	0.063	---	0.125	---	0.187	---	0.243	---	0.300	---
	-0.125	---	0.033	-0.093	-0.125	-0.187	-0.243	-0.283	-0.325	-0.375	-0.417	-0.467	-0.500
	-0.250	---	0.063	-0.133	-0.167	-0.223	-0.283	-0.325	-0.375	-0.417	-0.467	-0.500	-0.533
	-0.375	---	0.093	-0.193	-0.223	-0.283	-0.325	-0.375	-0.417	-0.467	-0.500	-0.533	-0.563
	-0.500	---	0.125	-0.250	-0.283	-0.325	-0.375	-0.417	-0.467	-0.500	-0.533	-0.563	-0.593
	-0.625	---	0.143	-0.300	-0.325	-0.375	-0.417	-0.467	-0.500	-0.533	-0.563	-0.593	-0.623
	-0.750	---	0.163	-0.325	-0.350	-0.393	-0.443	-0.493	-0.533	-0.573	-0.600	-0.623	-0.653
	-0.875	---	0.183	-0.353	-0.375	-0.417	-0.467	-0.500	-0.543	-0.580	-0.603	-0.623	-0.663
	-1.000	---	0.200	-0.375	-0.400	-0.443	-0.493	-0.533	-0.570	-0.603	-0.627	-0.643	-0.683
	-1.125	---	0.213	-0.393	-0.423	-0.467	-0.513	-0.543	-0.580	-0.603	-0.627	-0.643	-0.683

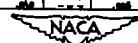
(c) M, 0.70.

Per cent semi-span	Per cent chord	Angle of attack, degrees											
		-4		0		2		4		6		8	
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
18.5	0	0.000	---	0.117	---	0.205	---	0.275	---	0.330	---	0.375	---
	-0.125	---	0.045	-0.117	-0.205	-0.275	-0.330	-0.375	-0.417	-0.467	-0.500	-0.533	-0.563
	-0.250	---	0.093	-0.167	-0.250	-0.325	-0.383	-0.433	-0.475	-0.517	-0.550	-0.573	-0.600
	-0.375	---	0.125	-0.205	-0.283	-0.350	-0.408	-0.453	-0.495	-0.533	-0.563	-0.583	-0.600
	-0.500	---	0.150	-0.250	-0.325	-0.393	-0.443	-0.483	-0.520	-0.553	-0.580	-0.600	-0.613
	-0.625	---	0.173	-0.275	-0.350	-0.417	-0.467	-0.500	-0.533	-0.563	-0.590	-0.613	-0.630
	-0.750	---	0.193	-0.300	-0.375	-0.443	-0.493	-0.525	-0.553	-0.580	-0.603	-0.623	-0.643
	-0.875	---	0.210	-0.325	-0.400	-0.467	-0.513	-0.543	-0.570	-0.603	-0.627	-0.643	-0.663
	-1.000	---	0.223	-0.343	-0.417	-0.483	-0.533	-0.563	-0.600	-0.627	-0.643	-0.663	-0.683
	-1.125	---	0.233	-0.353	-0.423	-0.493	-0.543	-0.573	-0.600	-0.627	-0.643	-0.663	-0.683
35	0	0.000	---	0.093	---	0.173	---	0.250	---	0.317	---	0.383	---
	-0.125	---	0.045	-0.100	-0.173	-0.250	-0.317	-0.383	-0.433	-0.483	-0.525	-0.563	-0.593
	-0.250	---	0.083	-0.167	-0.250	-0.325	-0.383	-0.433	-0.483	-0.533	-0.563	-0.593	-0.613
	-0.375	---	0.117	-0.205	-0.283	-0.350	-0.408	-0.453	-0.500	-0.543	-0.573	-0.600	-0.623
	-0.500	---	0.143	-0.250	-0.325	-0.393	-0.443	-0.493	-0.533	-0.573	-0.600	-0.623	-0.643
	-0.625	---	0.163	-0.275	-0.350	-0.417	-0.467	-0.500	-0.543	-0.580	-0.603	-0.623	-0.643
	-0.750	---	0.183	-0.300	-0.375	-0.443	-0.493	-0.525	-0.563	-0.600	-0.623	-0.643	-0.663
	-0.875	---	0.200	-0.325	-0.400	-0.467	-0.513	-0.543	-0.570	-0.603	-0.627	-0.643	-0.663
	-1.000	---	0.213	-0.343	-0.417	-0.483	-0.533	-0.563	-0.600	-0.627	-0.643	-0.663	-0.683
	-1.125	---	0.223	-0.353	-0.423	-0.493	-0.543	-0.573	-0.600	-0.627	-0.643	-0.663	-0.683
75	0	0.000	---	0.063	---	0.125	---	0.187	---	0.243	---	0.300	---
	-0.125	---	0.033	-0.093	-0.125	-0.187	-0.243	-0.283	-0.325	-0.375	-0.417	-0.467	-0.500
	-0.250	---	0.063	-0.133	-0.167	-0.223	-0.283	-0.325	-0.375	-0.417	-0.467	-0.500	-0.533
	-0.375	---	0.093	-0.193	-0.223	-0.283	-0.325	-0.375	-0.417	-0.467	-0.500	-0.533	-0.563
	-0.500	---	0.125	-0.250	-0.283	-0.325	-0.375	-0.417	-0.467	-0.500	-0.533	-0.563	-0.593
	-0.625	---	0.143	-0.300	-0.325	-0.375	-0.417	-0.467	-0.500	-0.533	-0.563	-0.593	-0.623
	-0.750	---	0.163	-0.325	-0.350	-0.393	-0.443	-0.493	-0.533	-0.573	-0.600	-0.623	-0.653
	-0.875	---	0.183	-0.353	-0.375	-0.417	-0.467	-0.500	-0.543	-0.580	-0.603	-0.623	-0.663
	-1.000	---	0.200	-0.375	-0.400	-0.443	-0.493	-0.533	-0.570	-0.603	-0.627	-0.643	-0.683
	-1.125	---	0.213	-0.393	-0.423	-0.467	-0.513	-0.543	-0.580	-0.603	-0.627	-0.643	-0.683
95	0	0.000	---	0.033	---	0.093	---	0.150	---	0.205	---	0.260	---
	-0.125	---	0.013	-0.033	-0.063	-0.117	-0.150	-0.187	-0.223	-0.263	-0.300	-0.343	-0.375
	-0.250	---	0.033	-0.093	-0.125	-0.167	-0.200	-0.223	-0.250	-0.283	-0.317	-0.343	

TABLE VII.—CONTINUED

(d) M,0.75.

(e) M,0.80.



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TABLE VII.—CONTINUED

(f) M,0.82.

(g) M,0.84.



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TABLE VII.— CONTINUED

(h) M,0.86.

Angle of attack, degrees	Angle of attack, degrees											
	-1		-2		0		2		4		6	
	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
-1.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

(i) M,0.88.

Angle of attack, degrees	Angle of attack, degrees											
	-1		-2		0		2		4		6	
	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
-1.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
4	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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TABLE VII.—CONTINUED

(j) M,0.90.

(k) M, 0.92.

Part number	Part number	Angle of attack, degrees							
		S				T			
		Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface	Upper surface	Lower surface
12-3	12-3	-0.16	0.16	-0.16	0.16	-0.03	0.03	-0.16	0.16
		-0.08	0.08	-0.08	0.08	-0.02	0.02	-0.08	0.08
		-0.04	0.04	-0.04	0.04	-0.01	0.01	-0.04	0.04
		-0.02	0.02	-0.02	0.02	-0.005	0.005	-0.02	0.02
		-0.01	0.01	-0.01	0.01	-0.002	0.002	-0.01	0.01
		-0.005	0.005	-0.005	0.005	-0.001	0.001	-0.005	0.005
		-0.002	0.002	-0.002	0.002	-0.0005	0.0005	-0.002	0.002
		-0.001	0.001	-0.001	0.001	-0.0002	0.0002	-0.001	0.001
		-0.0005	0.0005	-0.0005	0.0005	-0.0001	0.0001	-0.0005	0.0005
		-0.0002	0.0002	-0.0002	0.0002	-0.00005	0.00005	-0.0002	0.0002
12-3	12-3	-0.18	0.18	-0.18	0.18	-0.05	0.05	-0.18	0.18
		-0.09	0.09	-0.09	0.09	-0.03	0.03	-0.09	0.09
		-0.045	0.045	-0.045	0.045	-0.015	0.015	-0.045	0.045
		-0.0225	0.0225	-0.0225	0.0225	-0.005	0.005	-0.0225	0.0225
		-0.01125	0.01125	-0.01125	0.01125	-0.0025	0.0025	-0.01125	0.01125
		-0.005625	0.005625	-0.005625	0.005625	-0.00125	0.00125	-0.005625	0.005625
		-0.0028125	0.0028125	-0.0028125	0.0028125	-0.000625	0.000625	-0.0028125	0.0028125
		-0.00140625	0.00140625	-0.00140625	0.00140625	-0.0003125	0.0003125	-0.00140625	0.00140625
		-0.00068359375	0.00068359375	-0.00068359375	0.00068359375	-0.00015625	0.00015625	-0.00068359375	0.00068359375
		-0.000341771484375	0.000341771484375	-0.000341771484375	0.000341771484375	-0.000085470725	0.000085470725	-0.000341771484375	0.000341771484375
12-3	12-3	-0.19	0.19	-0.19	0.19	-0.06	0.06	-0.19	0.19
		-0.095	0.095	-0.095	0.095	-0.035	0.035	-0.095	0.095
		-0.0475	0.0475	-0.0475	0.0475	-0.0175	0.0175	-0.0475	0.0475
		-0.02375	0.02375	-0.02375	0.02375	-0.0075	0.0075	-0.02375	0.02375
		-0.011875	0.011875	-0.011875	0.011875	-0.00375	0.00375	-0.011875	0.011875
		-0.0059375	0.0059375	-0.0059375	0.0059375	-0.001875	0.001875	-0.0059375	0.0059375
		-0.00296875	0.00296875	-0.00296875	0.00296875	-0.0009375	0.0009375	-0.00296875	0.00296875
		-0.001484375	0.001484375	-0.001484375	0.001484375	-0.000484375	0.000484375	-0.001484375	0.001484375
		-0.00037109375	0.00037109375	-0.00037109375	0.00037109375	-0.00012109375	0.00012109375	-0.00037109375	0.00037109375
		-0.000185546875	0.000185546875	-0.000185546875	0.000185546875	-0.000061546875	0.000061546875	-0.000185546875	0.000185546875
12-3	12-3	-0.20	0.20	-0.20	0.20	-0.07	0.07	-0.20	0.20
		-0.10	0.10	-0.10	0.10	-0.04	0.04	-0.10	0.10
		-0.05	0.05	-0.05	0.05	-0.02	0.02	-0.05	0.05
		-0.025	0.025	-0.025	0.025	-0.01	0.01	-0.025	0.025
		-0.0125	0.0125	-0.0125	0.0125	-0.005	0.005	-0.0125	0.0125
		-0.00625	0.00625	-0.00625	0.00625	-0.003125	0.003125	-0.00625	0.00625
		-0.003125	0.003125	-0.003125	0.003125	-0.0015625	0.0015625	-0.003125	0.003125
		-0.0015625	0.0015625	-0.0015625	0.0015625	-0.00085470725	0.00085470725	-0.0015625	0.0015625
		-0.00078125	0.00078125	-0.00078125	0.00078125	-0.00042953125	0.00042953125	-0.00078125	0.00078125
		-0.000390625	0.000390625	-0.000390625	0.000390625	-0.00021484375	0.00021484375	-0.000390625	0.000390625
12-3	12-3	-0.21	0.21	-0.21	0.21	-0.08	0.08	-0.21	0.21
		-0.11	0.11	-0.11	0.11	-0.05	0.05	-0.11	0.11
		-0.055	0.055	-0.055	0.055	-0.025	0.025	-0.055	0.055
		-0.0275	0.0275	-0.0275	0.0275	-0.013	0.013	-0.0275	0.0275
		-0.01375	0.01375	-0.01375	0.01375	-0.006875	0.006875	-0.01375	0.01375
		-0.006875	0.006875	-0.006875	0.006875	-0.0034375	0.0034375	-0.006875	0.006875
		-0.0034375	0.0034375	-0.0034375	0.0034375	-0.00171875	0.00171875	-0.0034375	0.0034375
		-0.00171875	0.00171875	-0.00171875	0.00171875	-0.000859375	0.000859375	-0.00171875	0.00171875
		-0.000859375	0.000859375	-0.000859375	0.000859375	-0.00042953125	0.00042953125	-0.000859375	0.000859375
		-0.00042953125	0.00042953125	-0.00042953125	0.00042953125	-0.00021484375	0.00021484375	-0.00042953125	0.00042953125

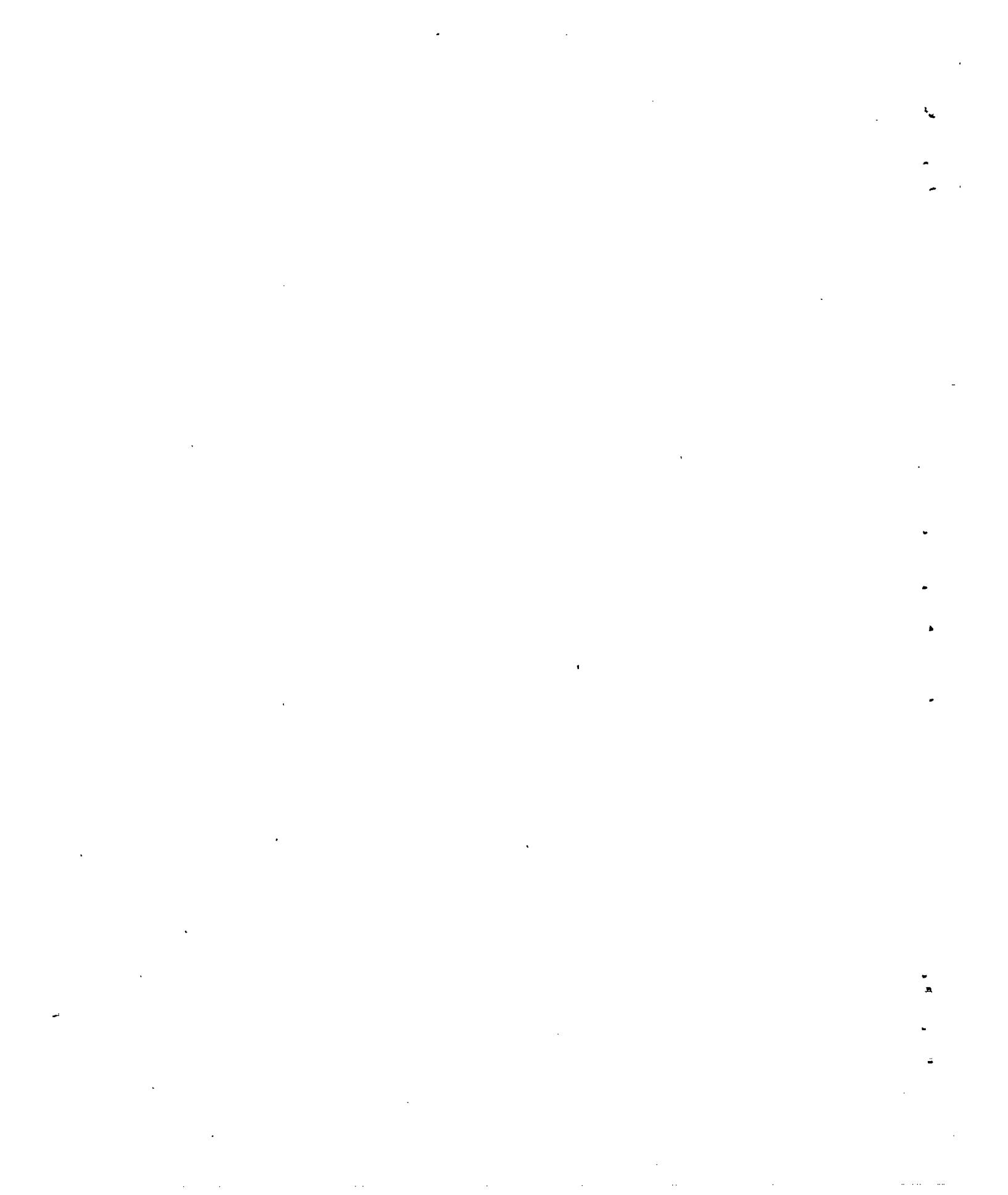
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TABLE VII.— CONCLUDED

(1) M, 0.94.

Percent semi-span	Percent chord	Angle of attack, degrees									
		-1	-2	0	1	2	3	Upper surface	Lower surface	Upper surface	Lower surface
12.5	0	---	---	0.179	---	0.046	---	-0.079	---	-0.200	---
	15	0.250	---	0.122	---	.022	---	-0.079	---	-0.153	---
	20	0.176	---	0.110	-0.154	-0.068	-0.104	-0.139	-0.094	-0.208	0.085
	25	0.041	-0.218	0.010	-0.154	-0.139	-0.125	-0.152	-0.063	-0.246	0.022
	30	0.014	-0.239	-0.039	-0.120	-0.176	-0.175	-0.217	-0.053	-0.266	0.022
	35	-0.068	-0.269	-0.091	---	-0.204	-0.209	-0.243	-0.129	-0.299	-0.093
	40	-0.093	-0.286	-0.120	-0.237	-0.240	-0.241	-0.278	-0.160	-0.338	-0.120
	45	-0.121	-0.305	-0.153	-0.261	-0.281	-0.283	-0.279	-0.150	-0.332	-0.120
	50	-0.111	-0.310	-0.140	-0.269	-0.281	-0.283	-0.279	-0.091	-0.310	-0.085
	55	-0.087	-0.290	-0.105	-0.230	-0.205	-0.205	-0.250	---	---	---
35	0	---	---	0.040	---	0.110	---	0.288	---	0.539	---
	15	0.136	---	0.300	---	0.178	---	0.030	---	0.050	---
	20	0.025	0.398	0.092	0.285	0.188	0.203	0.269	0.085	0.350	0.023
	25	0.070	0.342	0.140	0.308	0.229	0.247	0.300	0.140	0.372	0.023
	30	0.120	0.342	0.180	0.318	0.270	0.270	0.338	0.140	0.408	0.023
	35	0.136	0.422	0.190	0.387	0.270	0.285	0.300	0.155	0.450	0.130
	40	0.090	0.372	0.113	0.315	0.161	0.183	0.260	0.105	0.390	0.005
	45	-0.062	0.198	0.070	0.090	0.070	0.070	0.090	0.060	0.168	0.060
	50	-0.010	0.038	0.060	0.020	0.018	0.003	0.024	0.010	0.050	0.003
	55	0.027	0.015	0.015	0.015	0.015	0.017	0.017	0.011	0.011	0.011
55	0	0.312	---	0.428	---	0.469	---	0.370	---	0.235	---
	15	0.257	---	0.366	---	0.240	---	0.038	---	0.030	---
	20	0.408	---	0.330	---	0.176	---	0.070	---	0.008	---
	25	0.391	---	0.273	---	0.170	---	0.088	---	0.048	---
	30	-0.068	---	0.108	---	-0.167	---	-0.188	---	-0.332	---
	35	-0.073	---	0.108	---	-0.150	---	-0.188	---	-0.176	---
	40	-0.049	---	0.079	---	-0.120	---	-0.150	---	-0.117	---
	45	-0.048	---	0.065	---	-0.093	---	-0.115	---	-0.093	0.040
	50	-0.022	0.016	0.008	0.003	-0.083	0.028	-0.088	0.008	-0.017	0.022
	55	-0.047	0.030	0.038	0.058	0.021	0.021	0.030	0.038	0.022	0.048
75	0	---	---	0.078	---	-0.067	---	-0.293	---	-0.588	---
	15	0.121	---	0.260	---	0.122	---	0.083	---	0.087	---
	20	0.200	---	0.200	---	0.100	---	0.068	---	0.045	---
	25	0.083	0.213	0.060	0.190	0.137	0.125	0.213	0.068	0.240	0.023
	30	0.049	0.245	0.094	0.199	0.148	0.142	0.190	0.086	0.231	0.071
	35	0.074	0.196	0.065	0.130	0.101	0.102	0.128	0.067	0.157	0.057
	40	0.042	0.184	0.063	0.130	0.075	0.068	0.080	0.040	0.091	0.040
	45	0.023	0.088	0.046	0.080	0.075	0.068	0.080	0.030	0.030	0.033
	50	0.030	0.018	0.018	0.003	0.030	0.033	0.034	0.032	0.038	0.033
	55	0.032	0.050	0.050	0.035	0.030	0.033	0.034	0.032	0.038	0.033
95	0	0.180	---	0.360	---	0.500	---	0.500	---	0.420	---
	15	0.097	---	0.365	---	0.500	---	0.502	---	0.273	---
	20	0.039	0.291	0.018	0.247	0.135	0.130	0.182	0.010	0.066	0.005
	25	0.060	0.301	0.129	0.392	0.205	0.227	0.282	0.138	0.317	0.097
	30	0.082	0.112	0.101	0.110	0.127	0.127	0.112	0.058	0.108	0.101
	35	0.073	0.088	0.090	0.100	0.093	0.108	0.086	0.043	0.100	0.088
	40	0.038	0.045	0.032	0.068	0.050	0.061	0.043	0.038	0.040	0.038
	45	0.018	0.067	0.015	0.100	0.067	0.088	0.073	0.031	0.022	0.011
	50	0.088	0.107	0.067	0.100	0.088	0.088	0.088	0.038	0.078	0.078
	55	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011	0.011



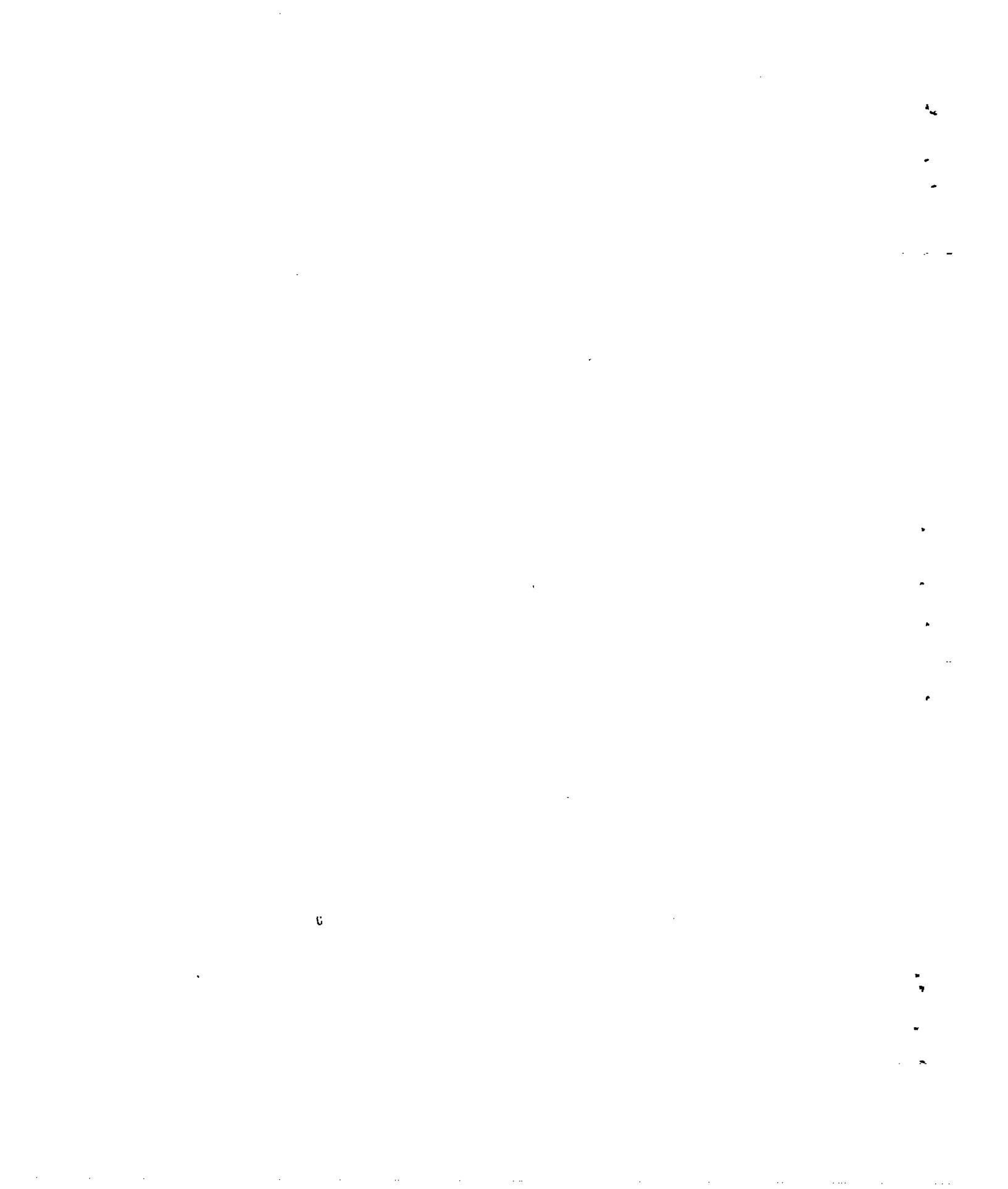


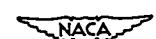
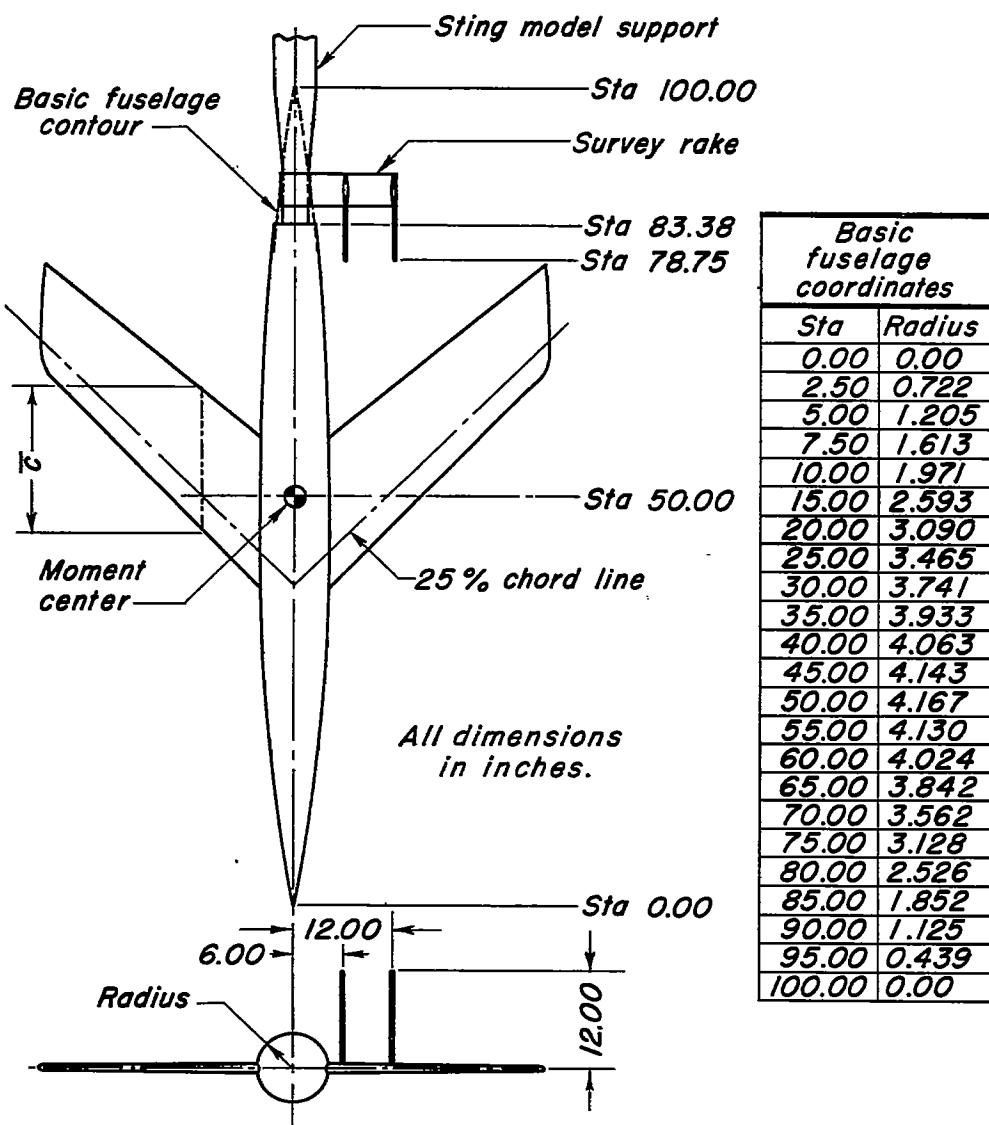
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REF ID: A6240



Figure 1.— Photograph of one of the wing-fuselage combinations and the survey rake mounted in the Ames 16-foot high-speed wind tunnel.





(a) Dimensions and coordinates.

Figure 2.—General arrangement of model showing a typical wing-fuselage combination with survey rake in position and fuselage details.

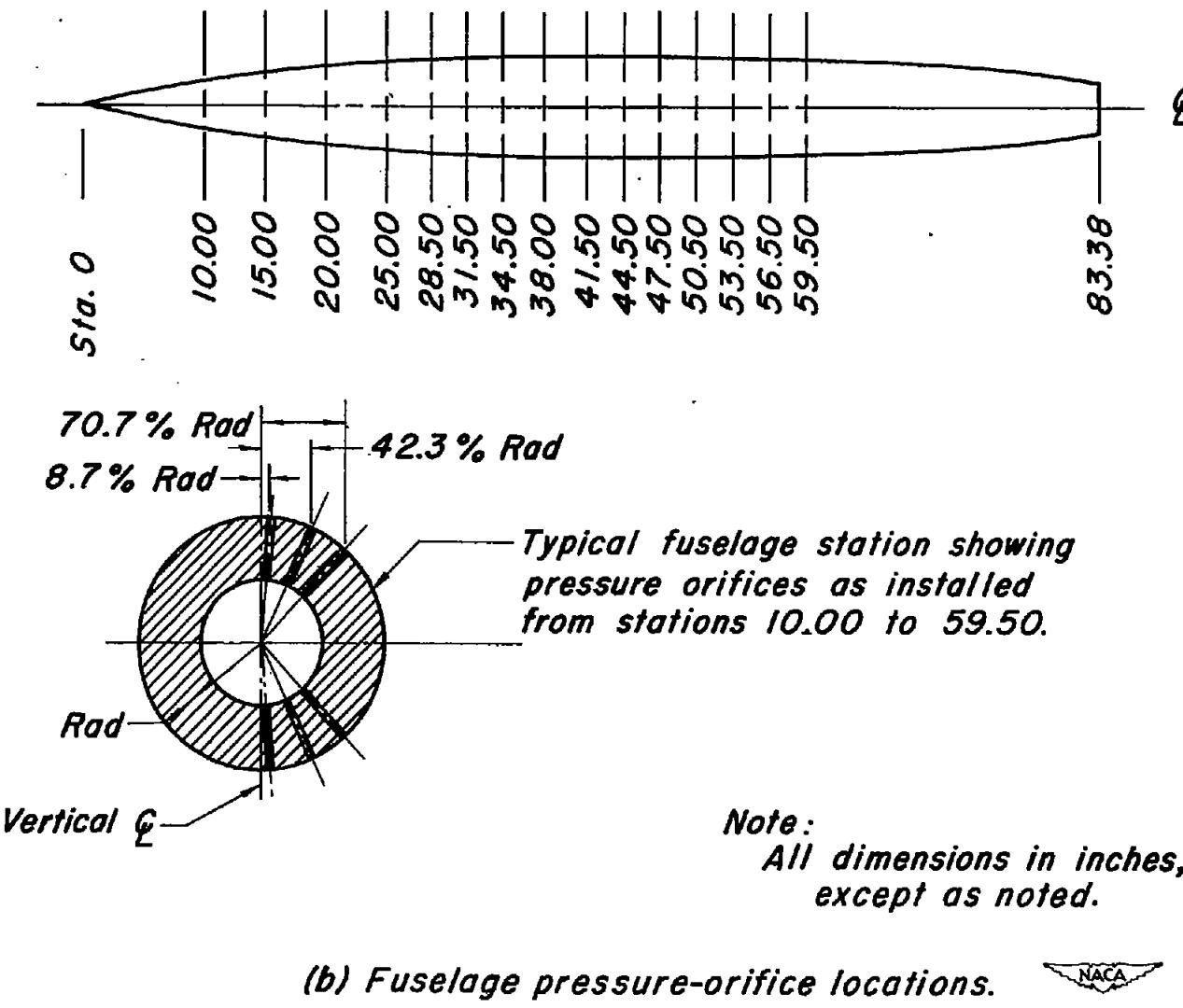
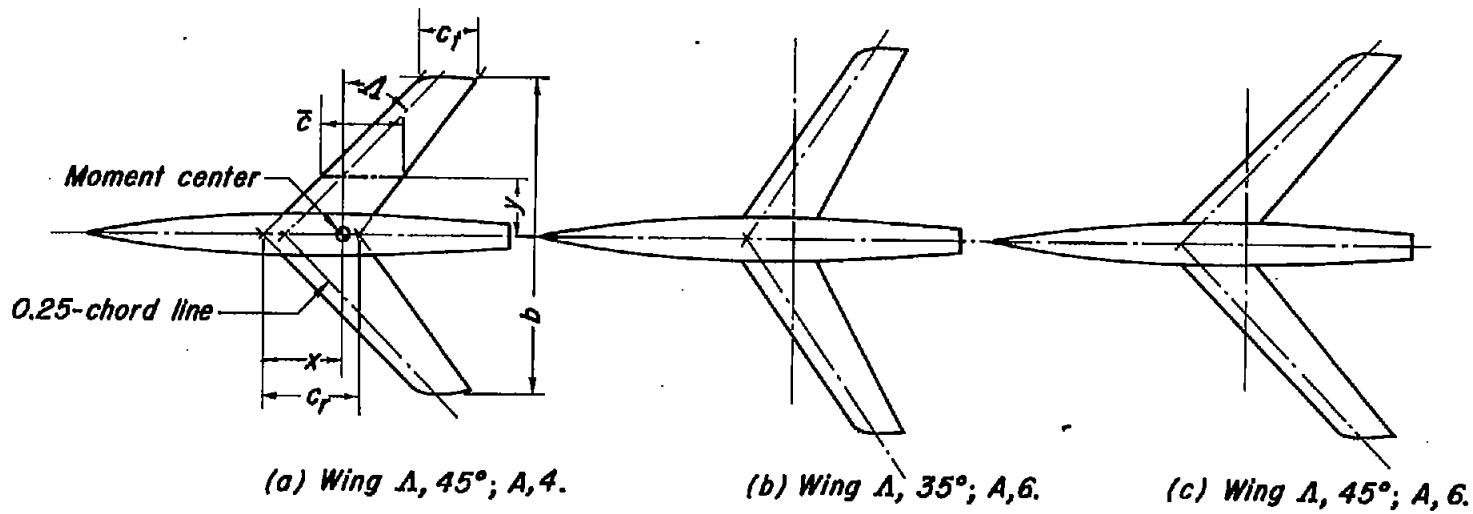


Figure 2.- Concluded.

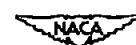




Wing	λ	b	c_r	c_t	\bar{c}	x	y	S
(a)	0.6	60.000	18.750	11.250	15.313	18.438	13.750	6.25
(b)	0.6	73.485	15.310	9.190	12.503	15.621	16.840	6.25
(c)	0.6	73.485	15.310	9.190	12.503	20.669	16.840	6.25

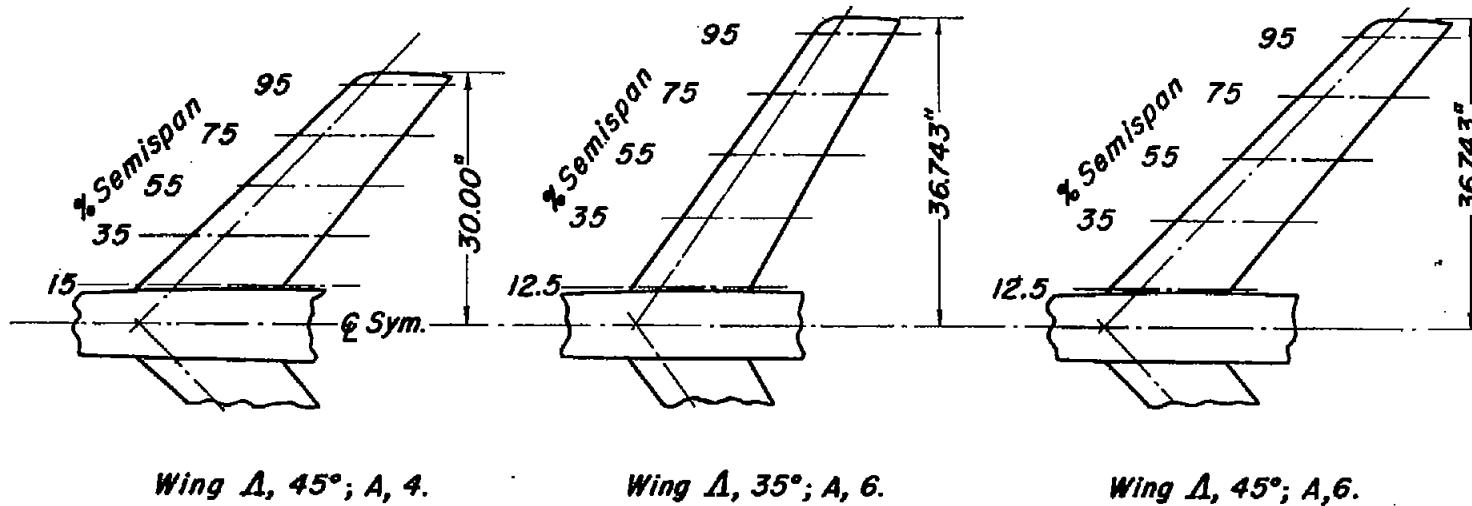
Notes:

- (1) Wing sections parallel to free stream are NACA 65A006 for all wings.
- (2) Wings are mounted at zero angles of incidence and dihedral.
- (3) All dimensions in inches and areas in square feet.



(a) Dimensions and details.

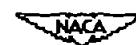
Figure 3.- Wing plan forms.



Note:

Twenty pressure orifices were installed at each wing station as follows: 0, 5, 10, 20, 30, 40, 50, 60, 70, 80, and 90 % wing chord on the upper surface and 10, 20, 30, 40, 50, 60, 70, 80, and 90 % wing chord on the lower surface.

*(b) Wing pressure-orifice locations.
Figure 3.—Concluded.*



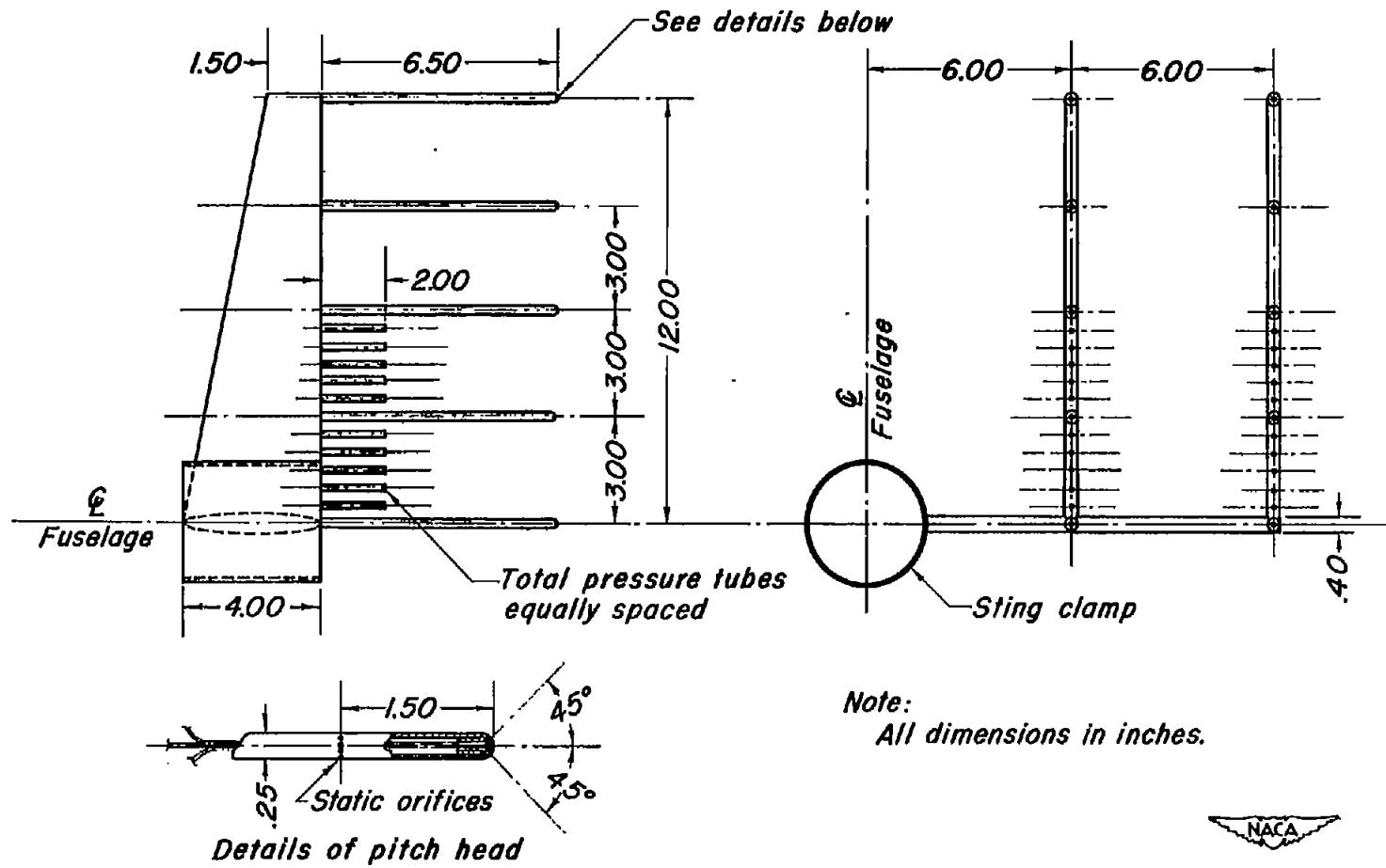
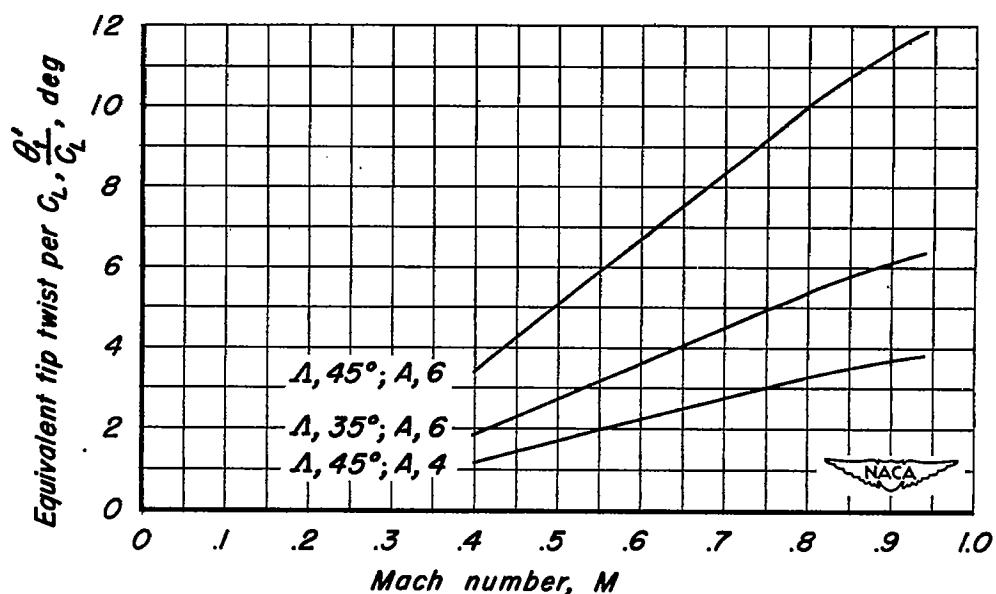
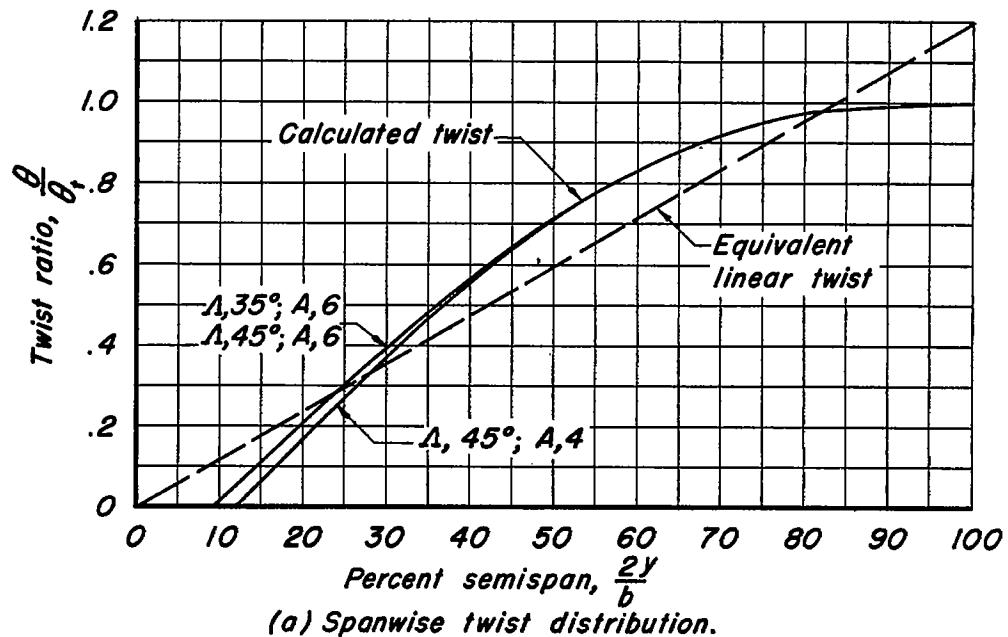


Figure 4.—Survey rake details and dimensions.



(b) Variation of equivalent twist with Mach number assuming linear twist distribution.

Figure 5.—Wing twist due to elasticity for the three wing-fuselage models under the conditions of test.

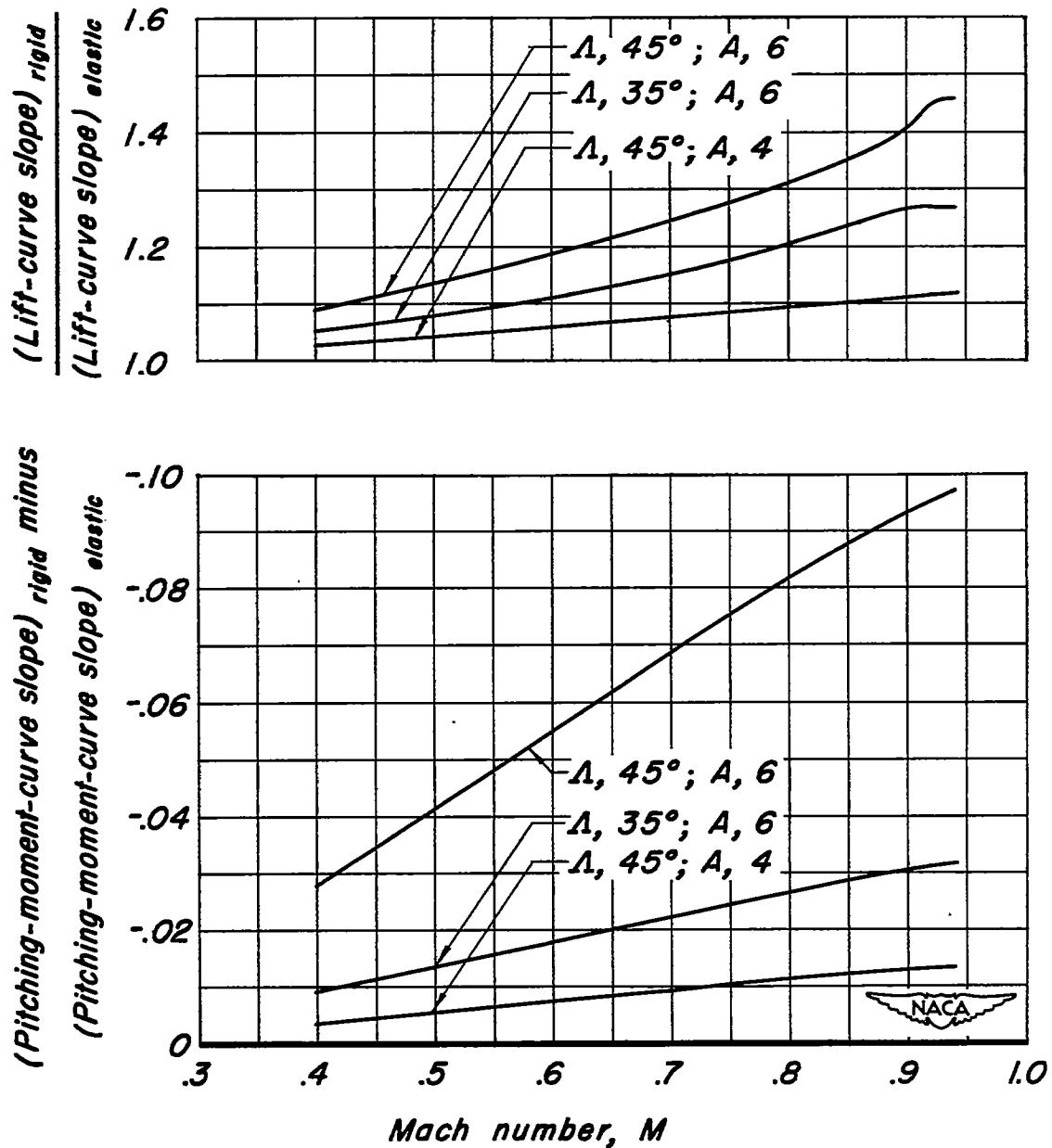


Figure 6.—Effect of aeroelastic twist on the lift-curve and pitching-moment-curve slopes for the three wing-fuselage combinations.

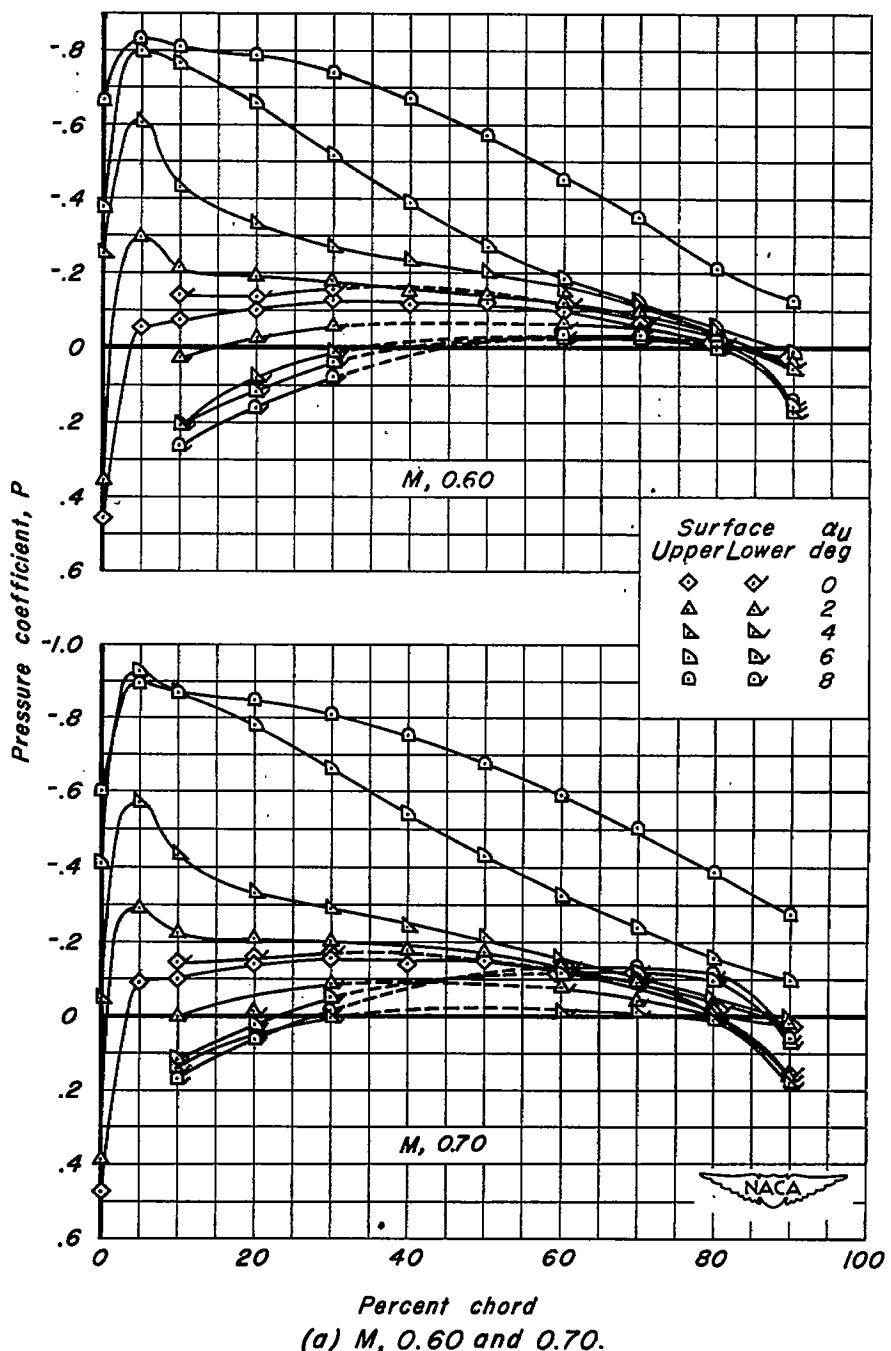
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Figure 7.—Chordwise distribution of pressures on a wing having a sweepback angle of 45° and an aspect ratio of 4 in combination with a fuselage. 75 % semispan.

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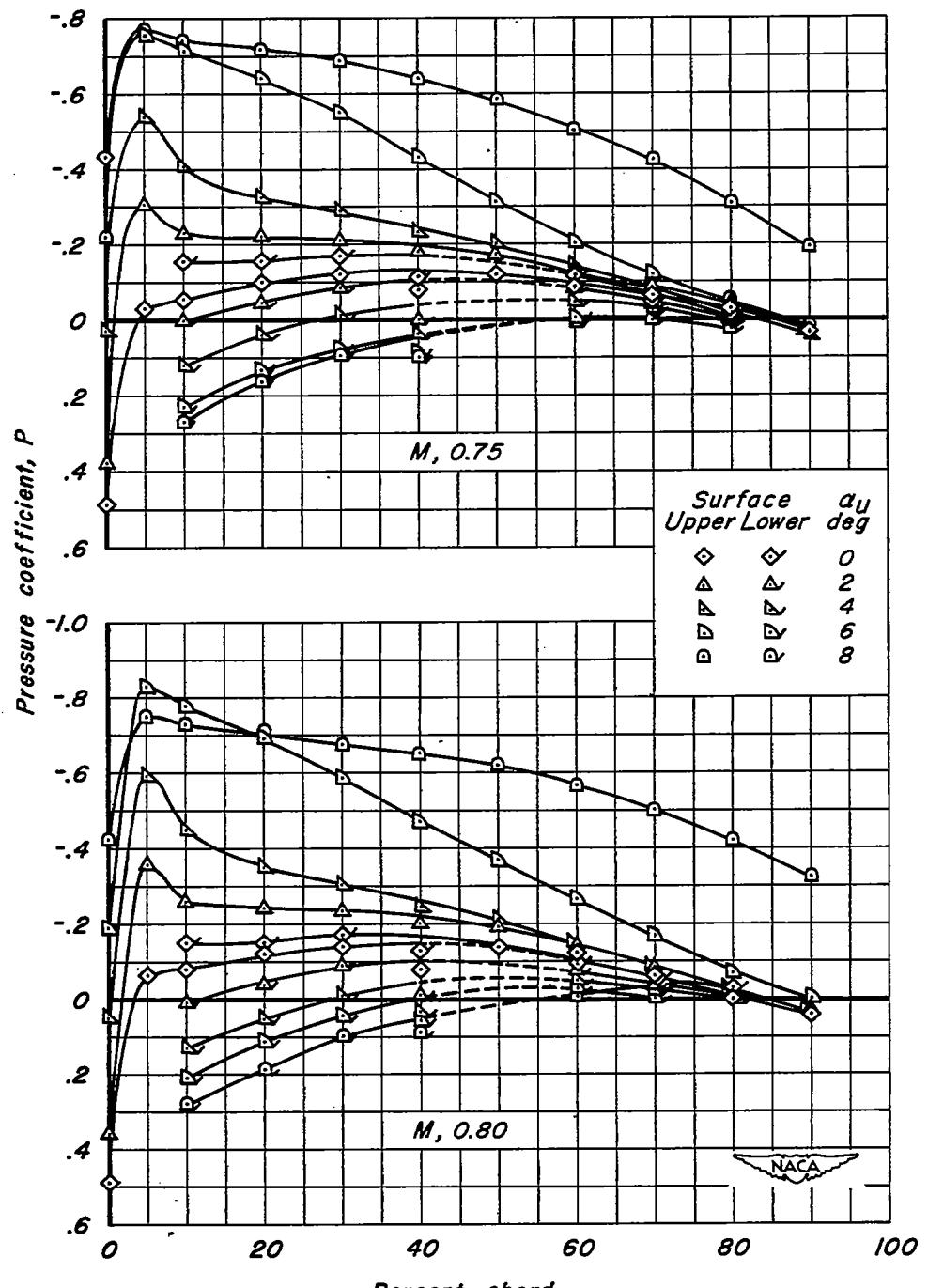
(b) $M, 0.75$ and 0.80 .

Figure 7.—Continued.

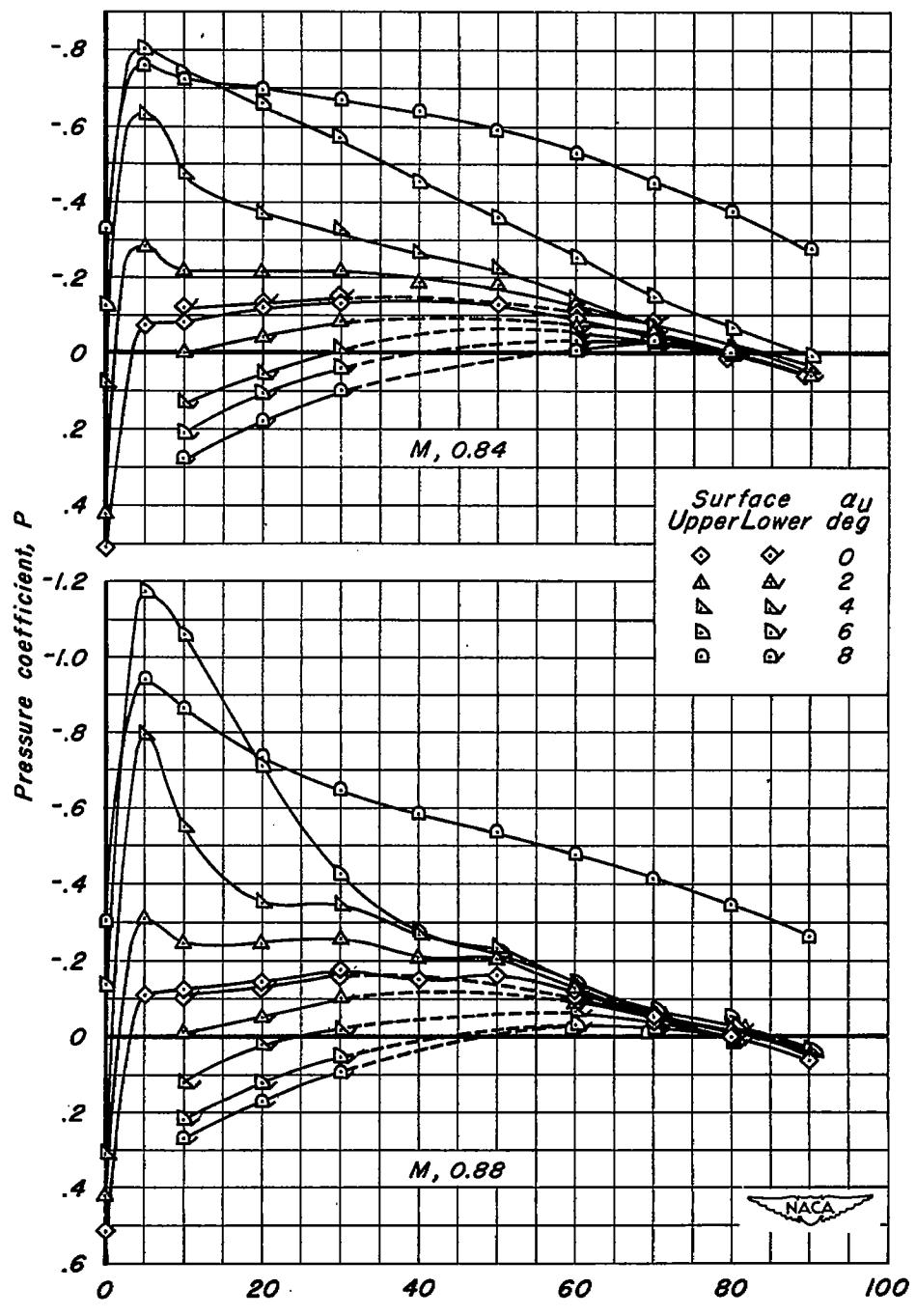
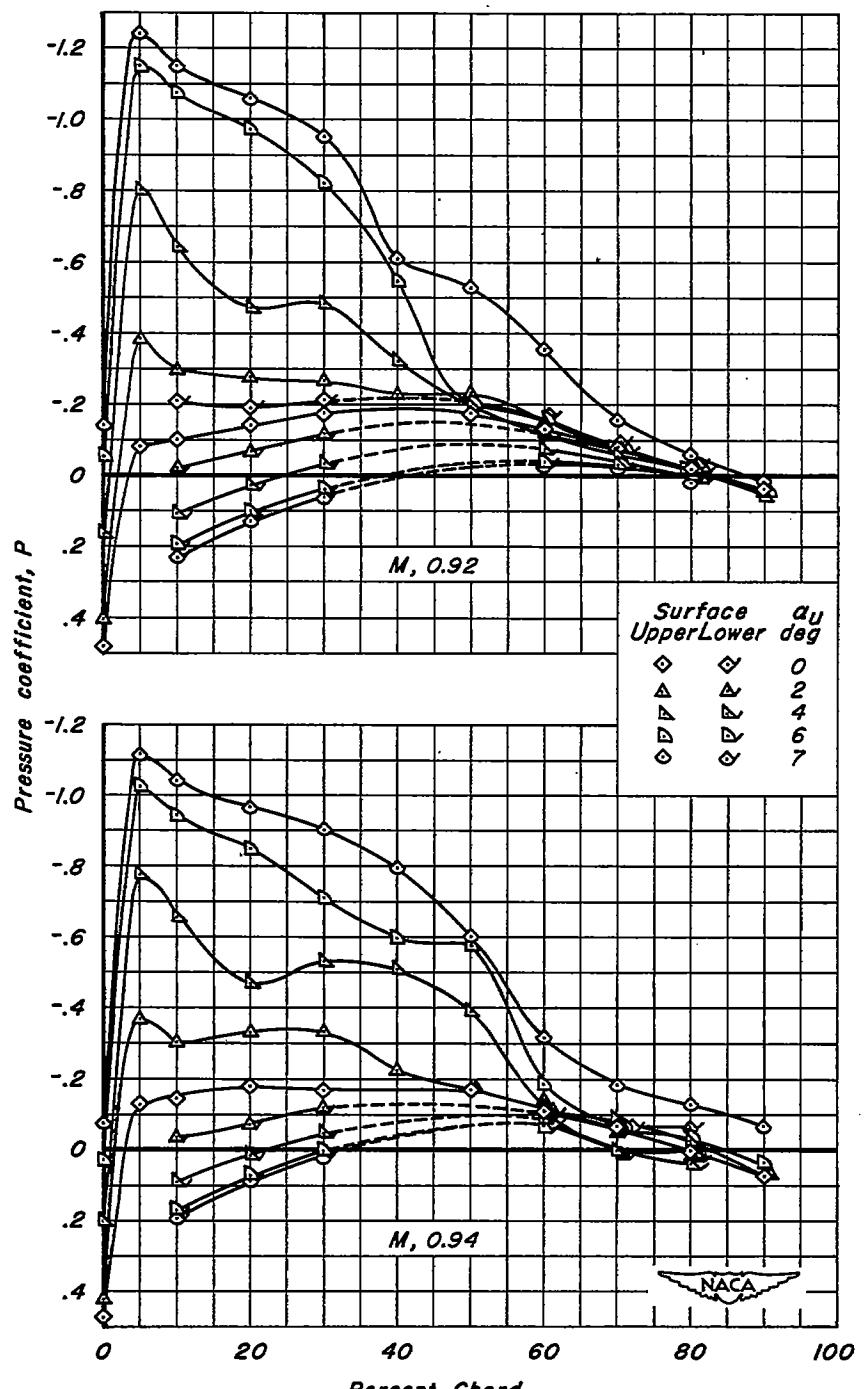
(c) $M, 0.84$ and 0.88 .

Figure 7. - Continued.



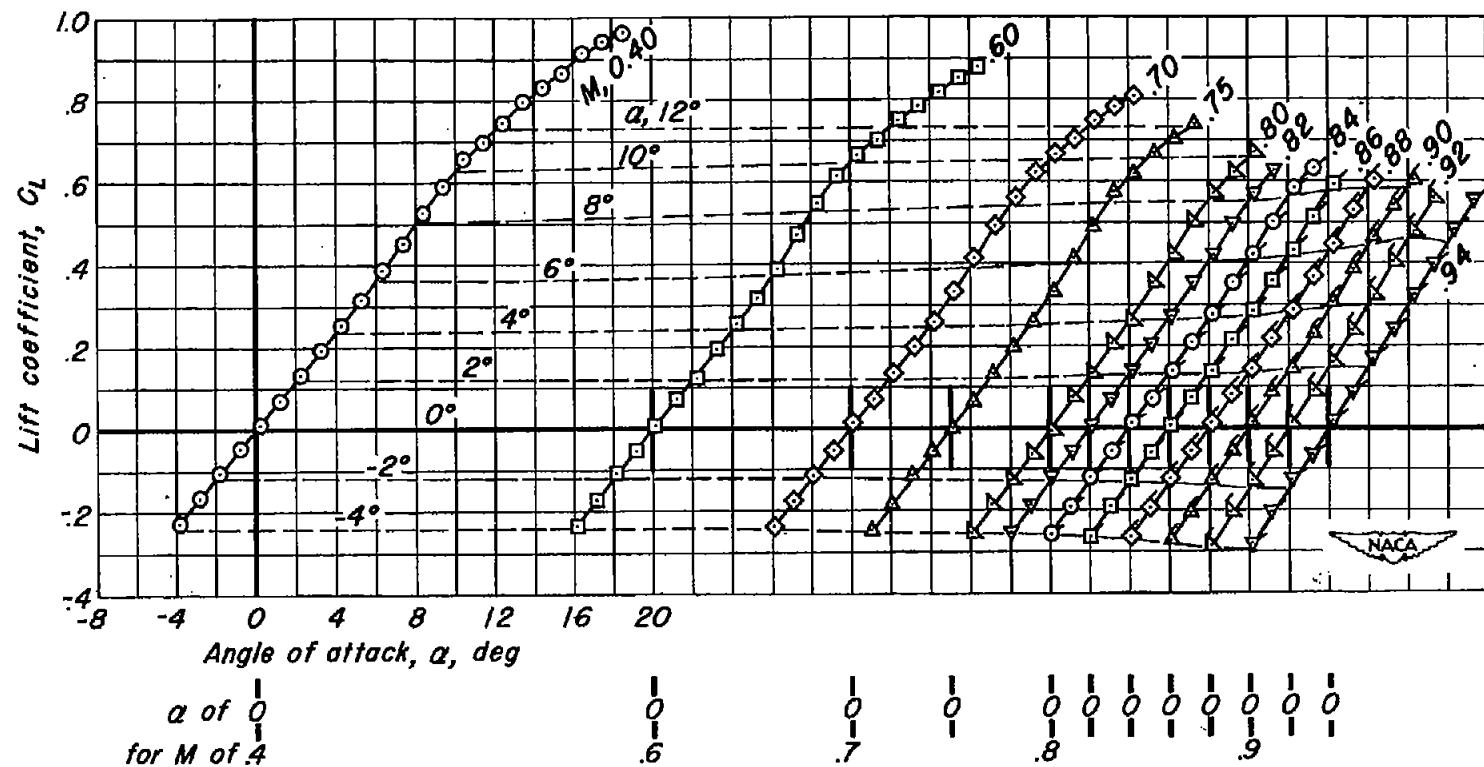
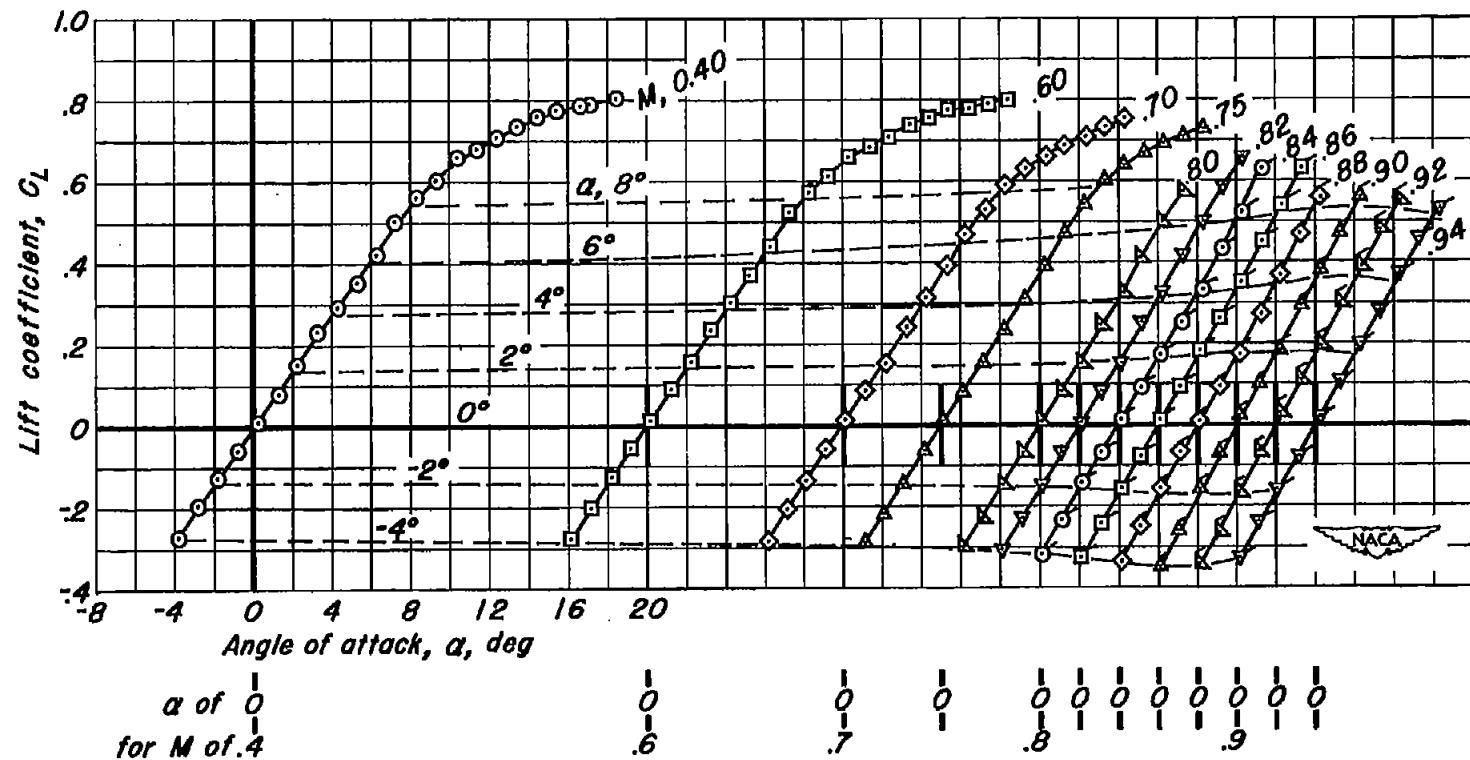
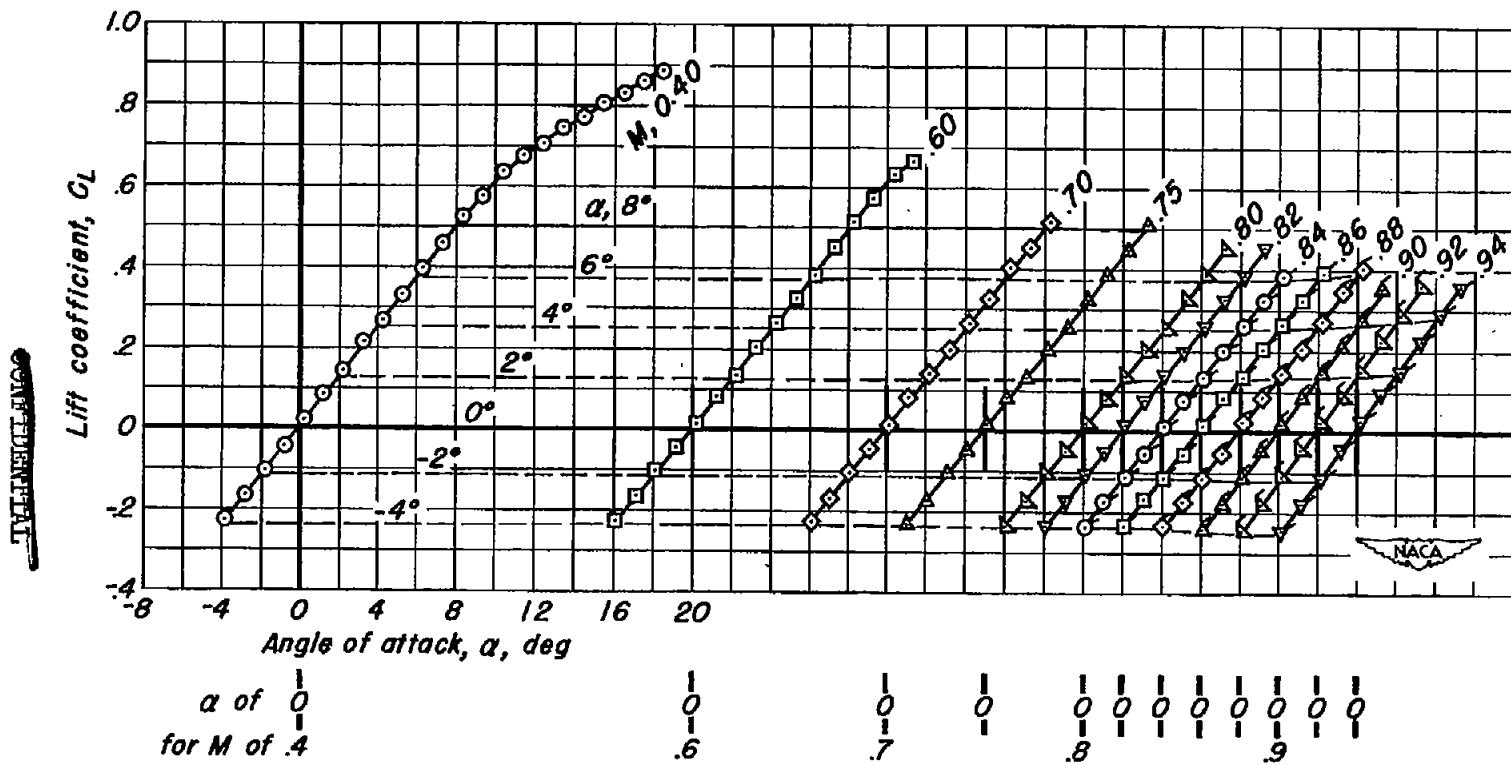
(a) Wing A, 45° ; A, 4.

Figure 8.—Lift characteristics for the three wing-fuselage combinations.



(b) Wing A, 35°; A, 6.

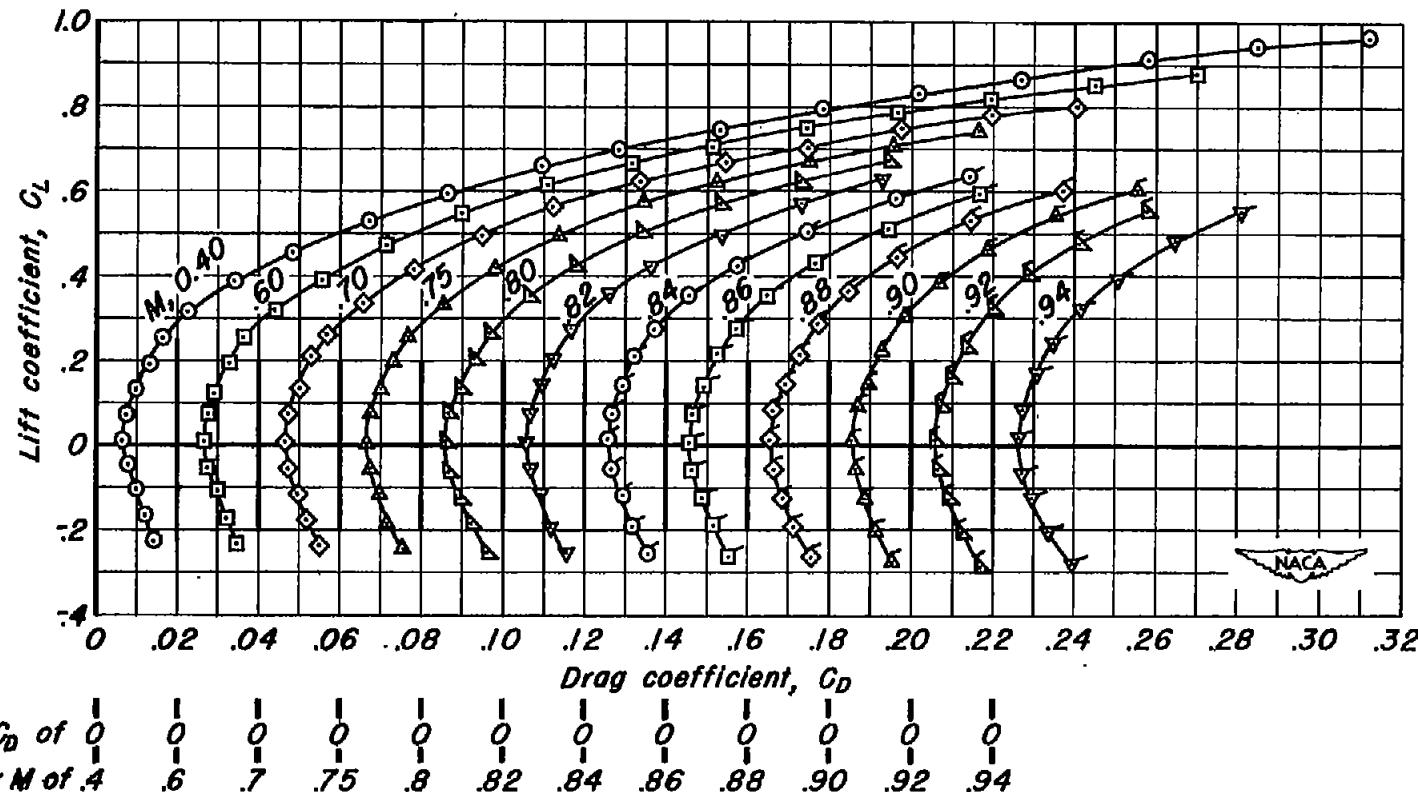
Figure 8.—Continued.



(c) Wing A, 45°; A, 6.

Figure 8.—Concluded.

WING-FUSELAGE



(a) Wing A, 45°; A, 4.

Figure 9.—Drag characteristics for the three wing-fuselage combinations.

CONTINUED

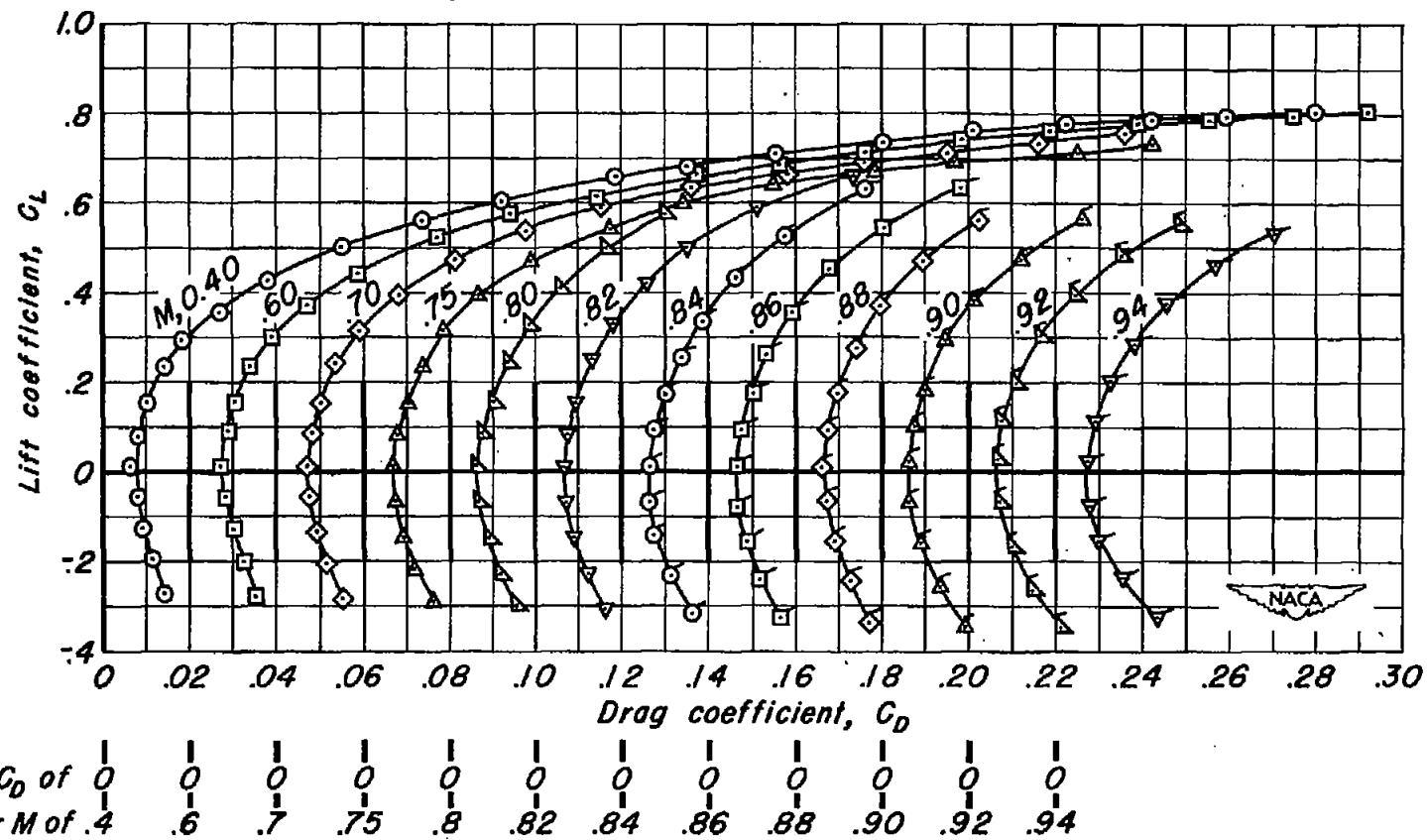
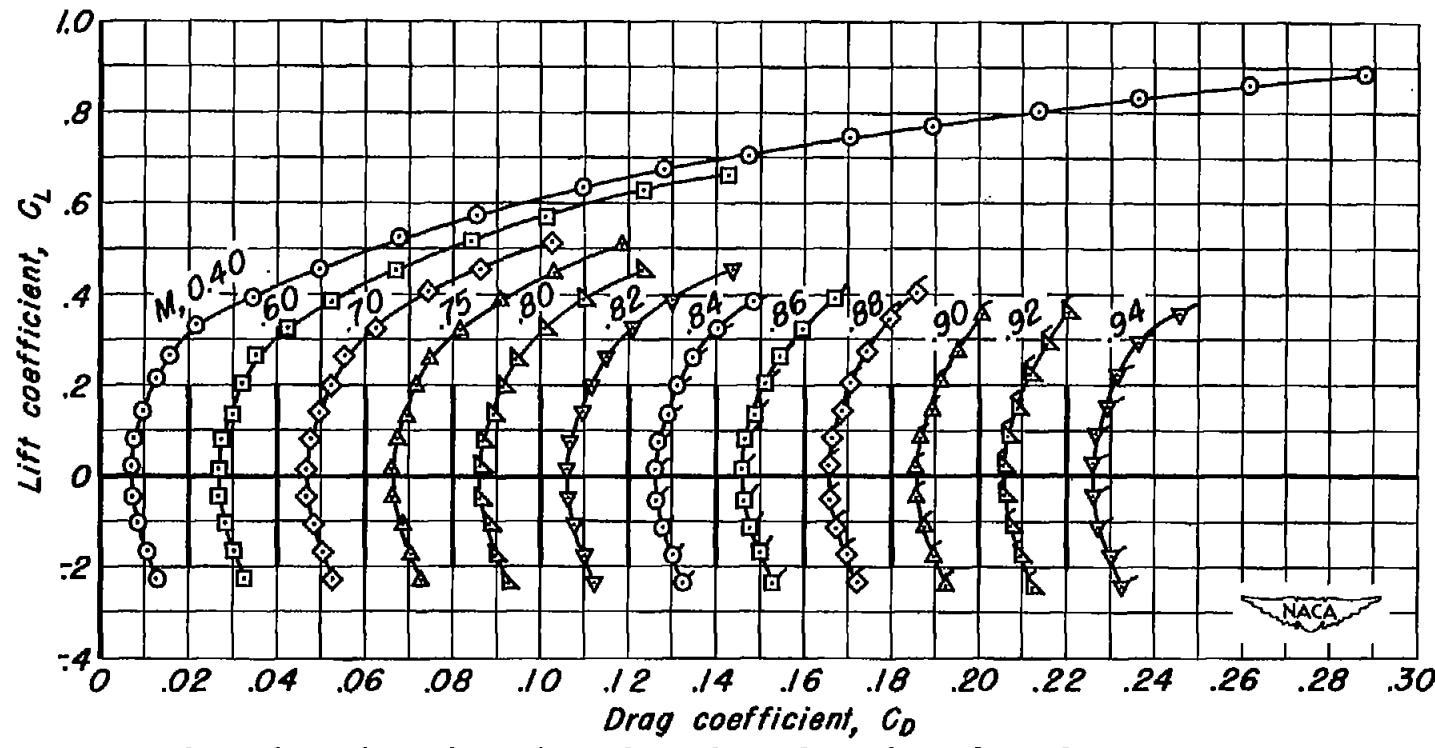
(b) Wing A, 35° ; A, 6.

Figure 9.—Continued.

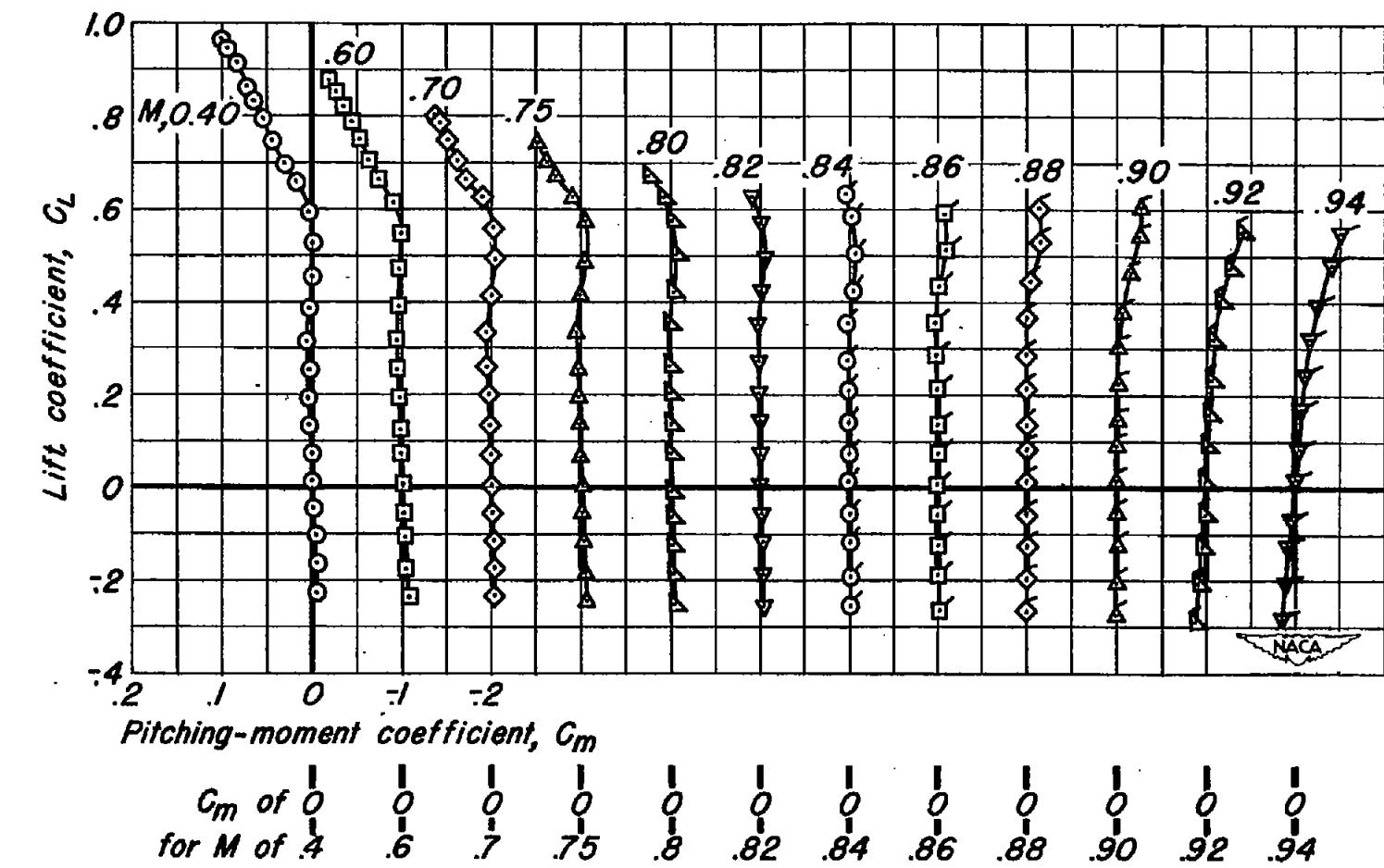
TURBULENT FLOW



C_D of 0	0	0	0	0	0	0	0	0	0	0	0
for M of .4	.6	.7	.75	.8	.82	.84	.86	.88	.90	.92	.94

(c) Wing A, 45°; A, 6.

Figure 9.—Concluded.



(a) Wing A, 45°; A, 4.

Figure 10.-Pitching-moment characteristics for the three wing-fuselage combinations.

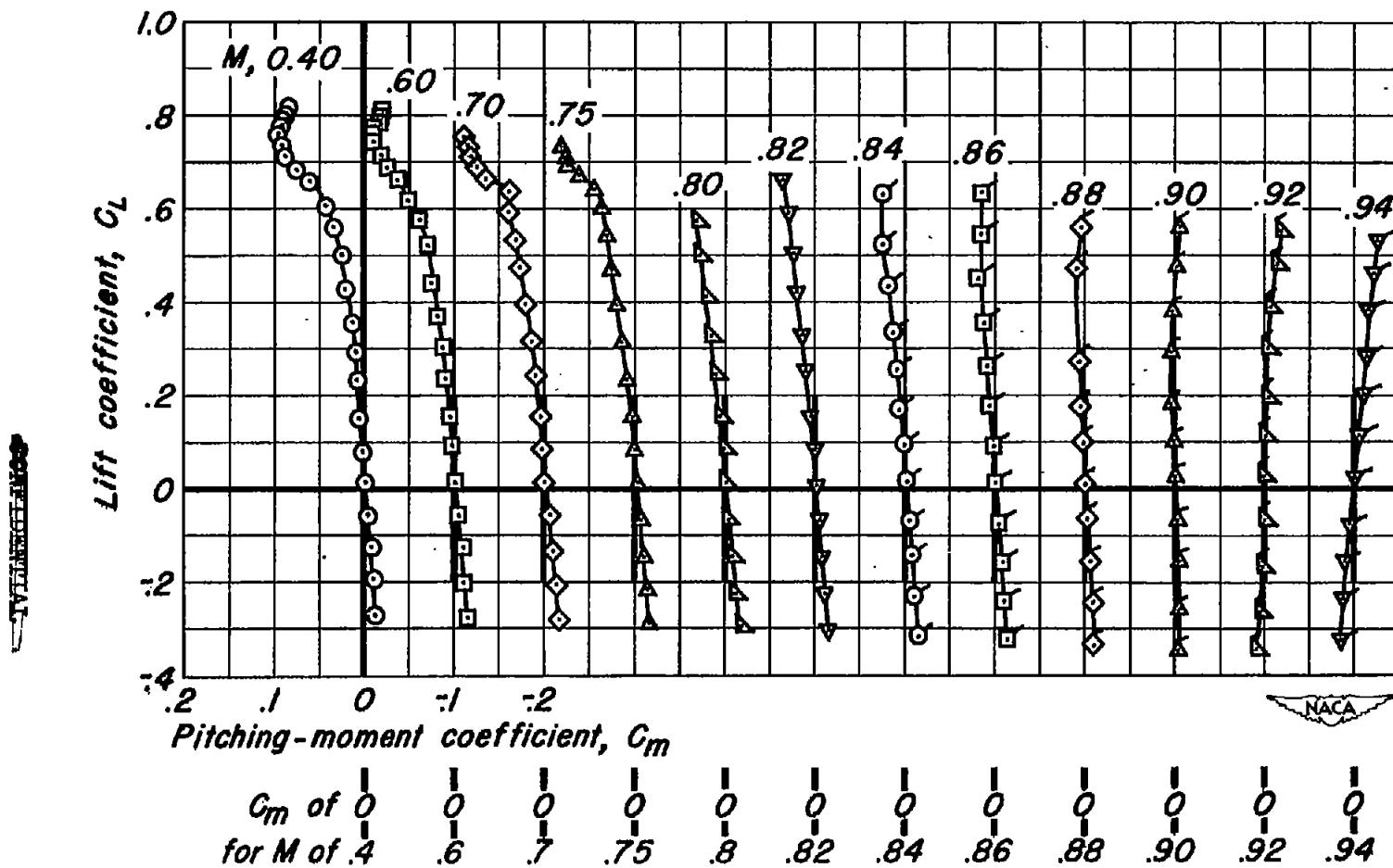
(b) Wing A, 35° ; A, 6.

Figure 10.-Continued.

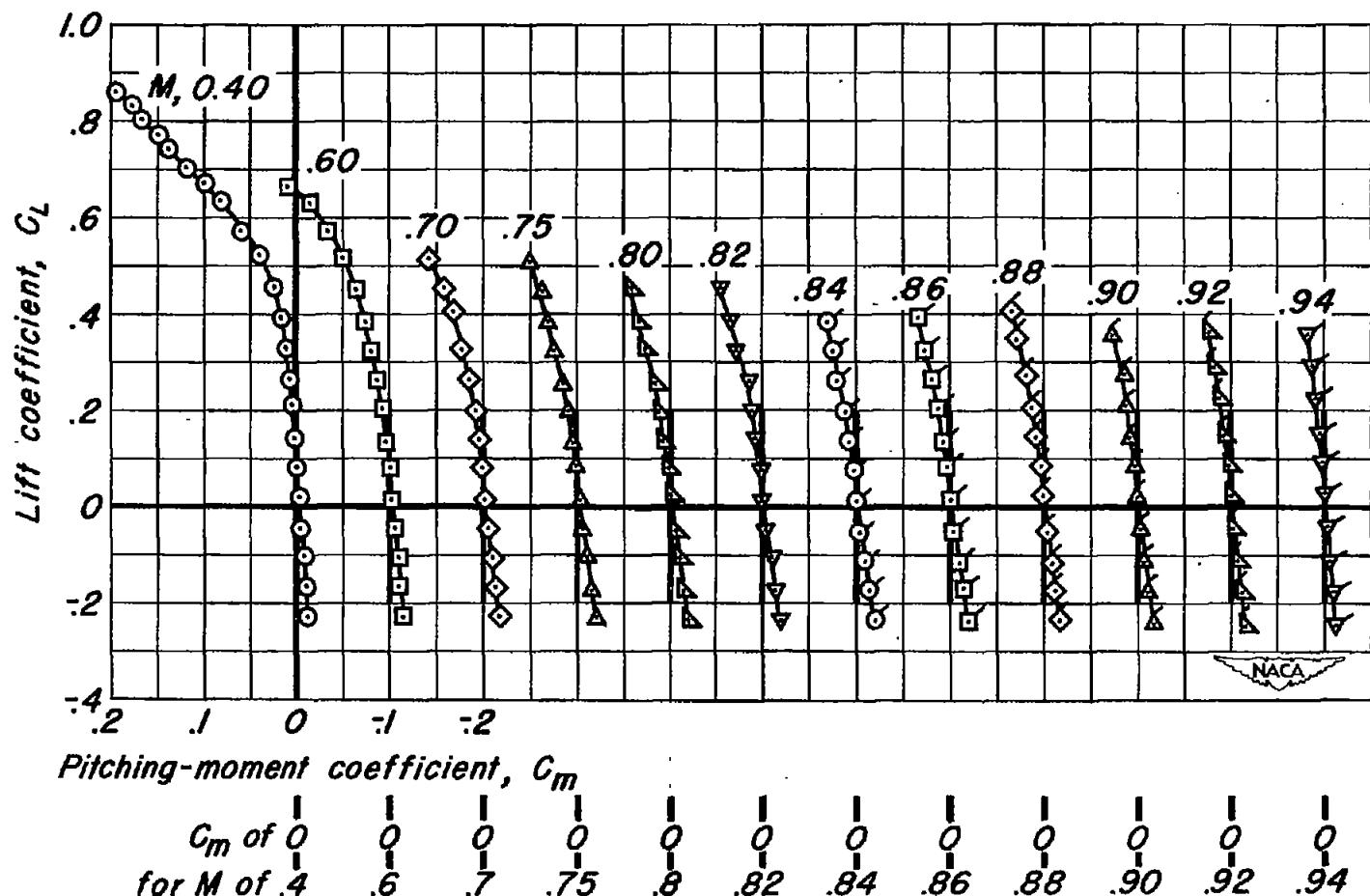
(c) Wing A, 45° ; A, 6.

Figure 10.-Concluded.

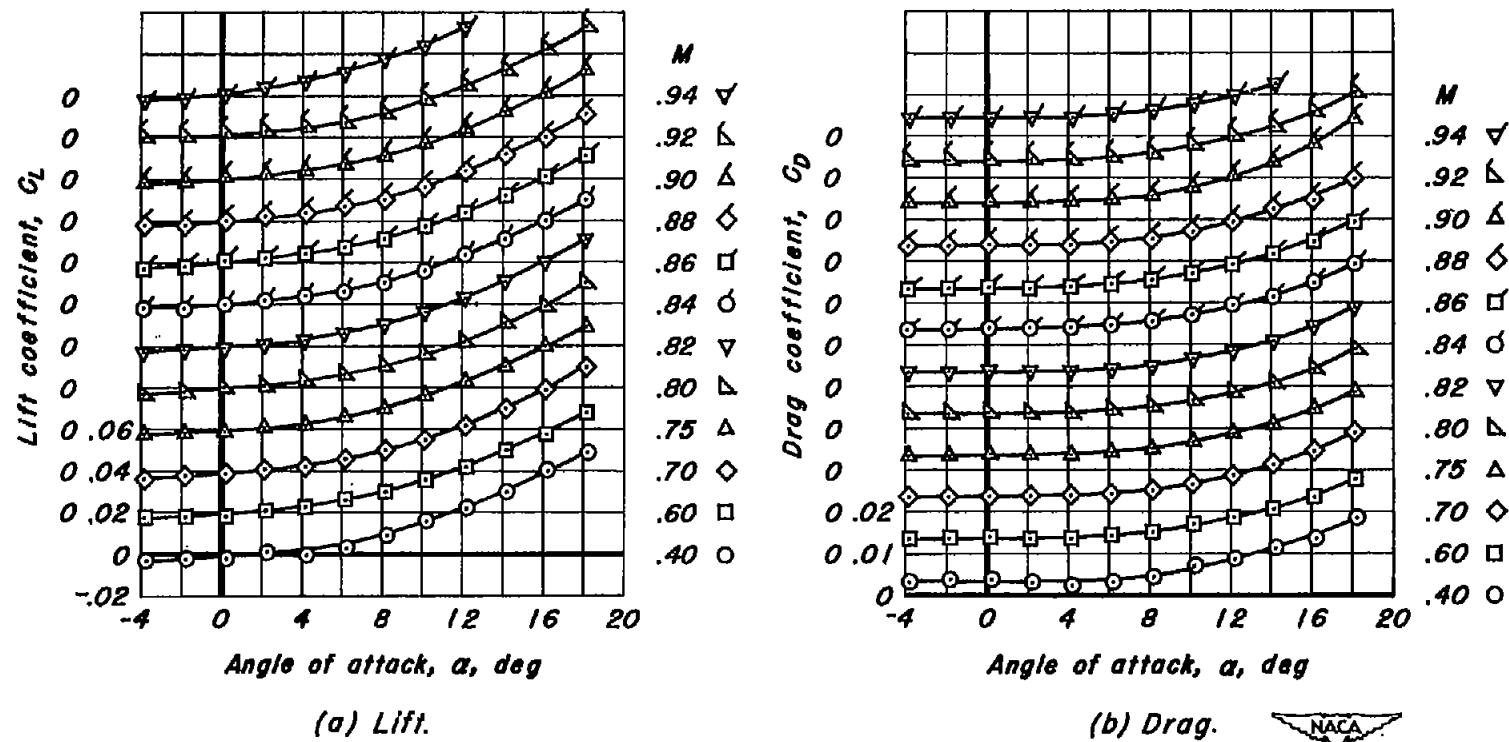
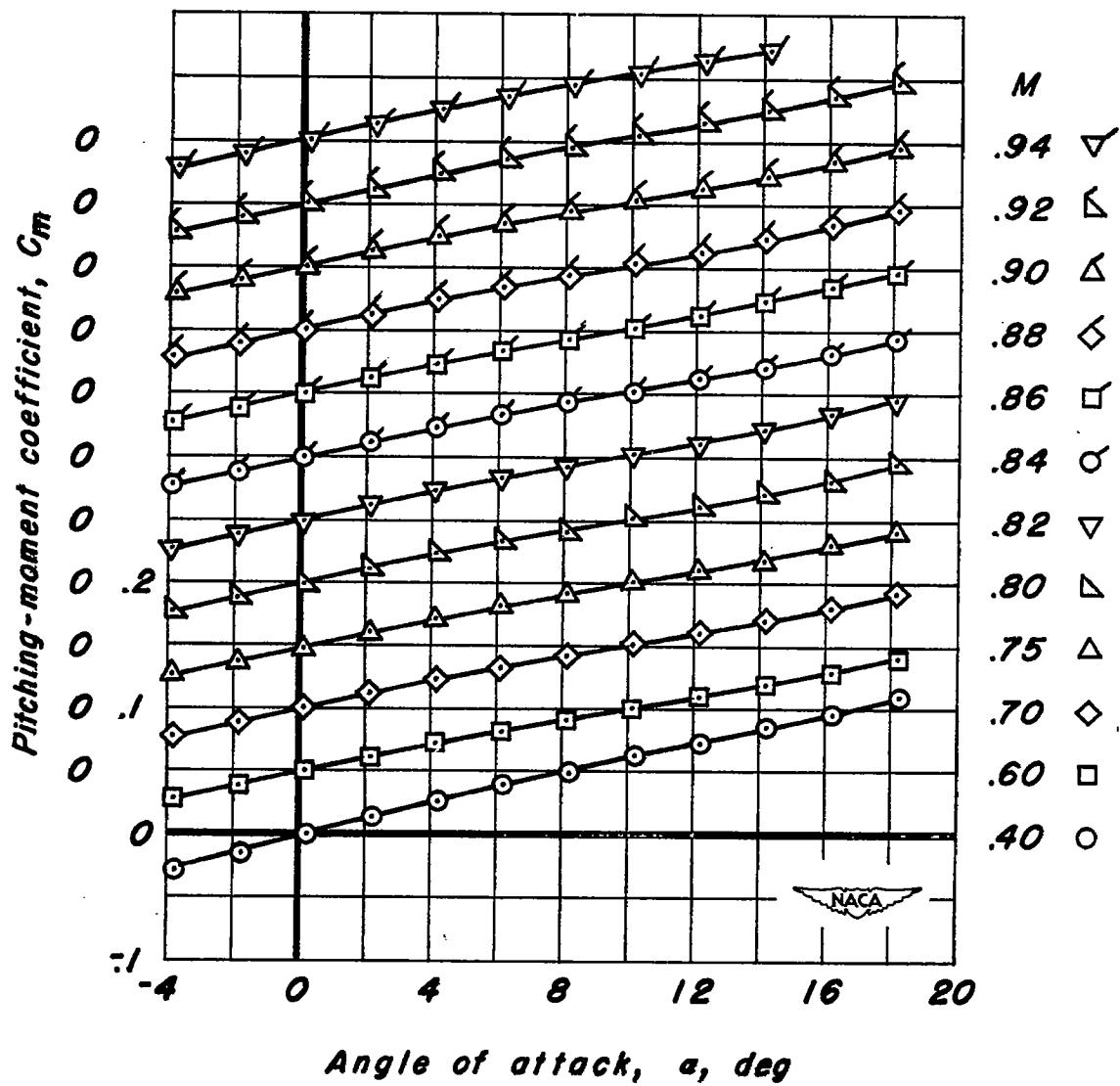


Figure 11.—Aerodynamic characteristics of the fuselage.



(c) Pitching moment.

Figure 11.—Concluded.

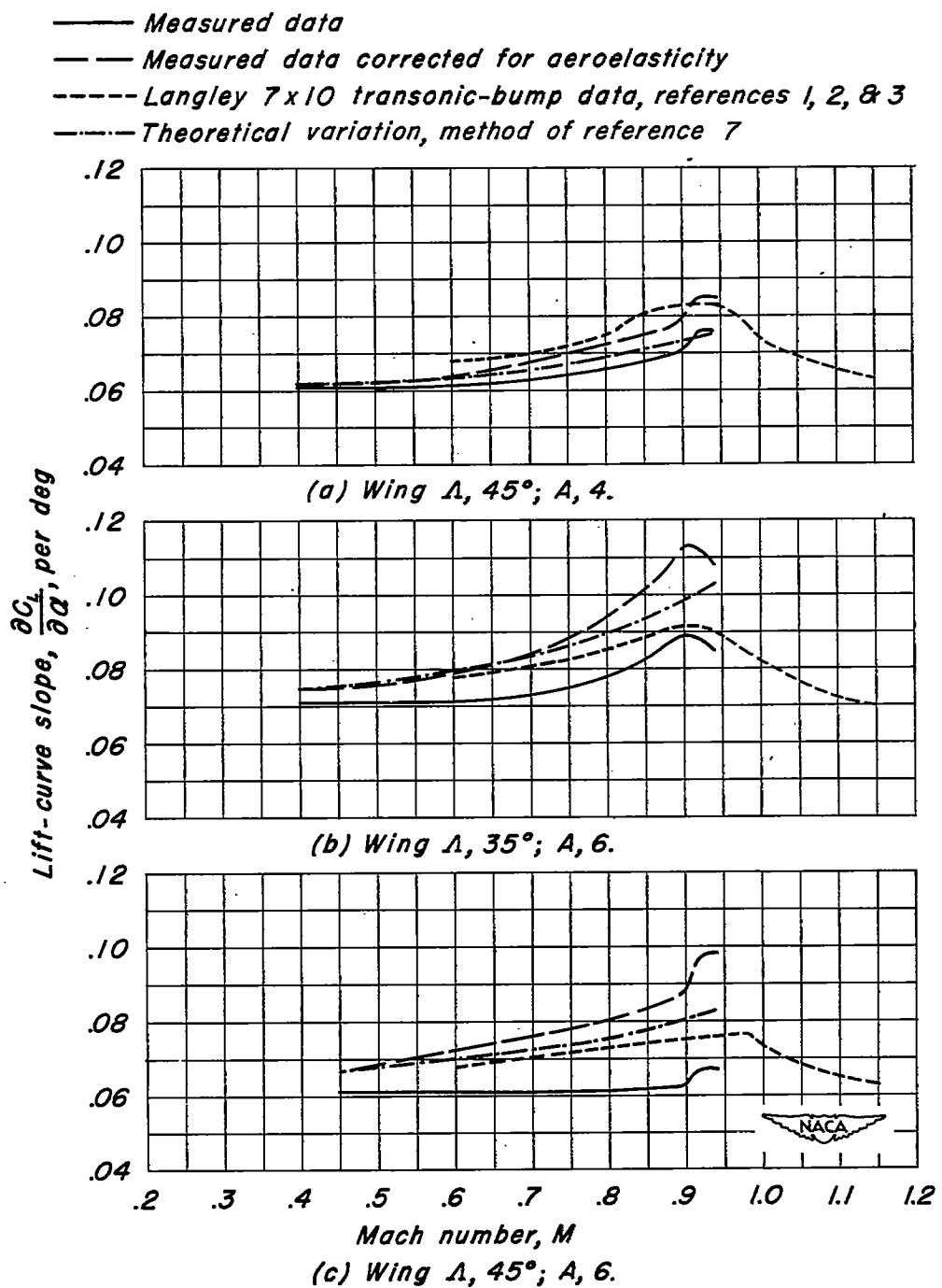


Figure 12.—Effect of Mach number on the lift-curve slopes of the three wing-fuselage combinations. $C_L = 0.2$.

——— Measured data
 - - - - Measured data corrected for aeroelasticity
 - - - - Langley 7x10 transonic bump data, reference, 1, 2 & 3

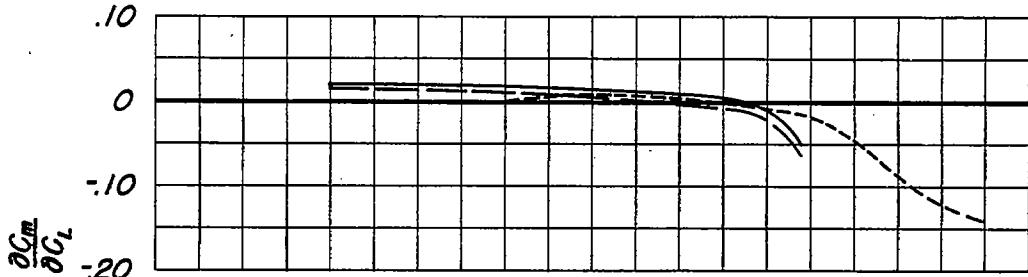
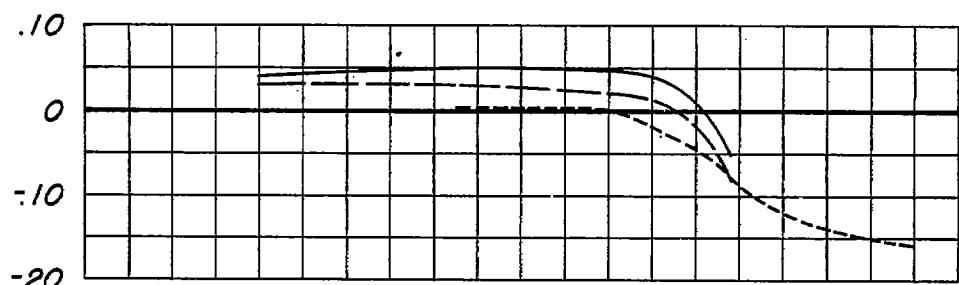
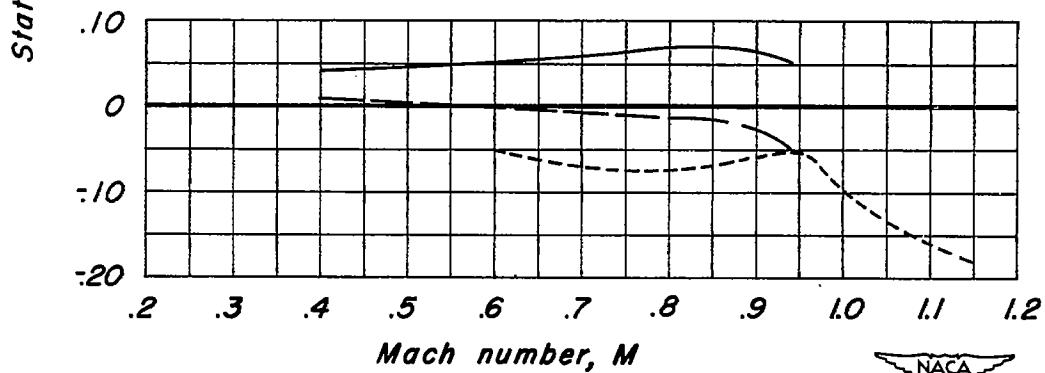
(a) Wing A, 45° ; A, 4.(b) Wing A, 35° ; A, 6.(c) Wing A, 45° ; A, 6.

Figure 13.—Effect of Mach number on the stability parameter $\frac{\partial C_m}{\partial C_L}$ of the three wing-fuselage combinations. $C_L = 0.2$.

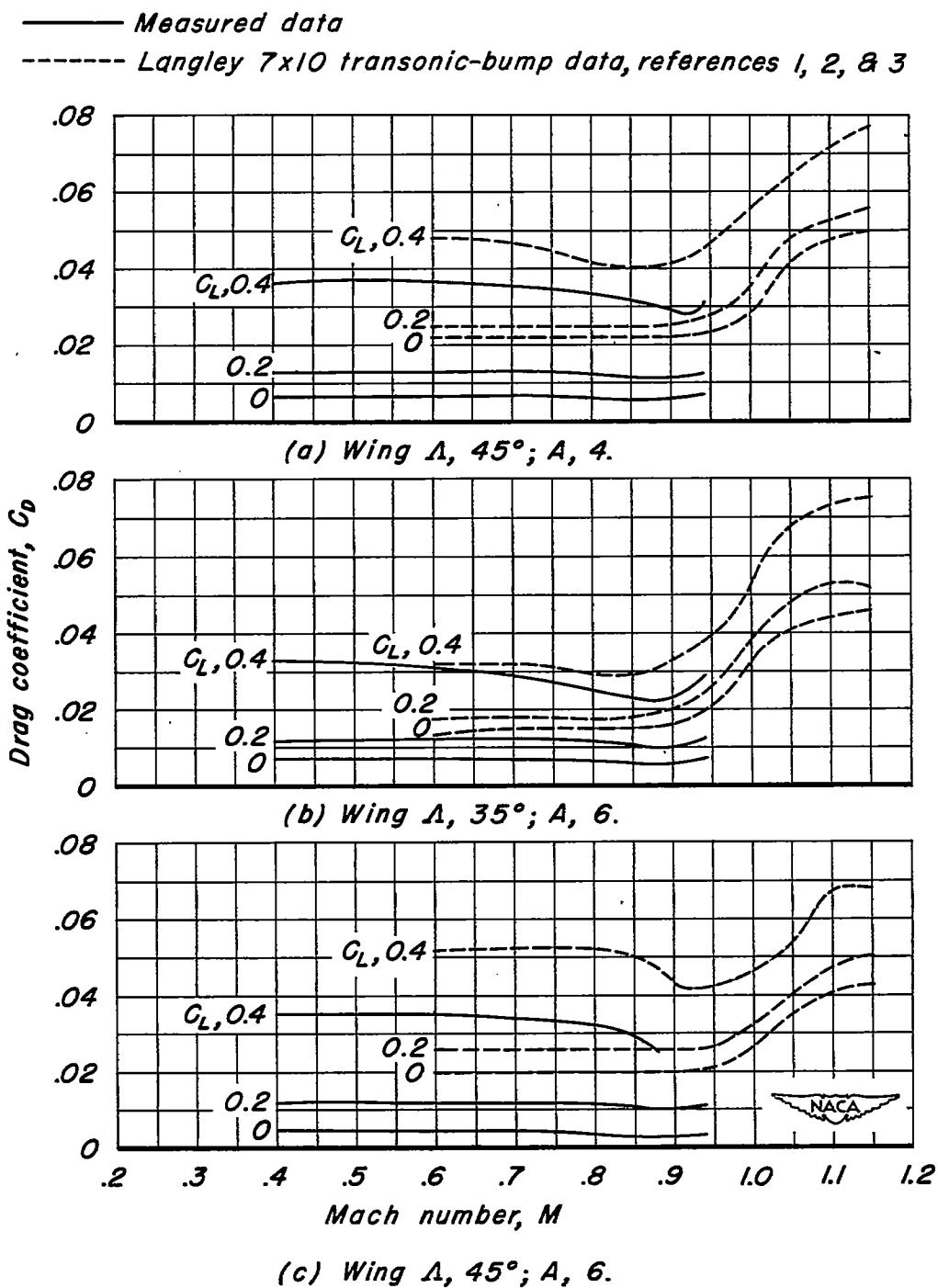


Figure 14.—Effect of Mach number on the drag characteristics of the three wing-fuselage combinations.

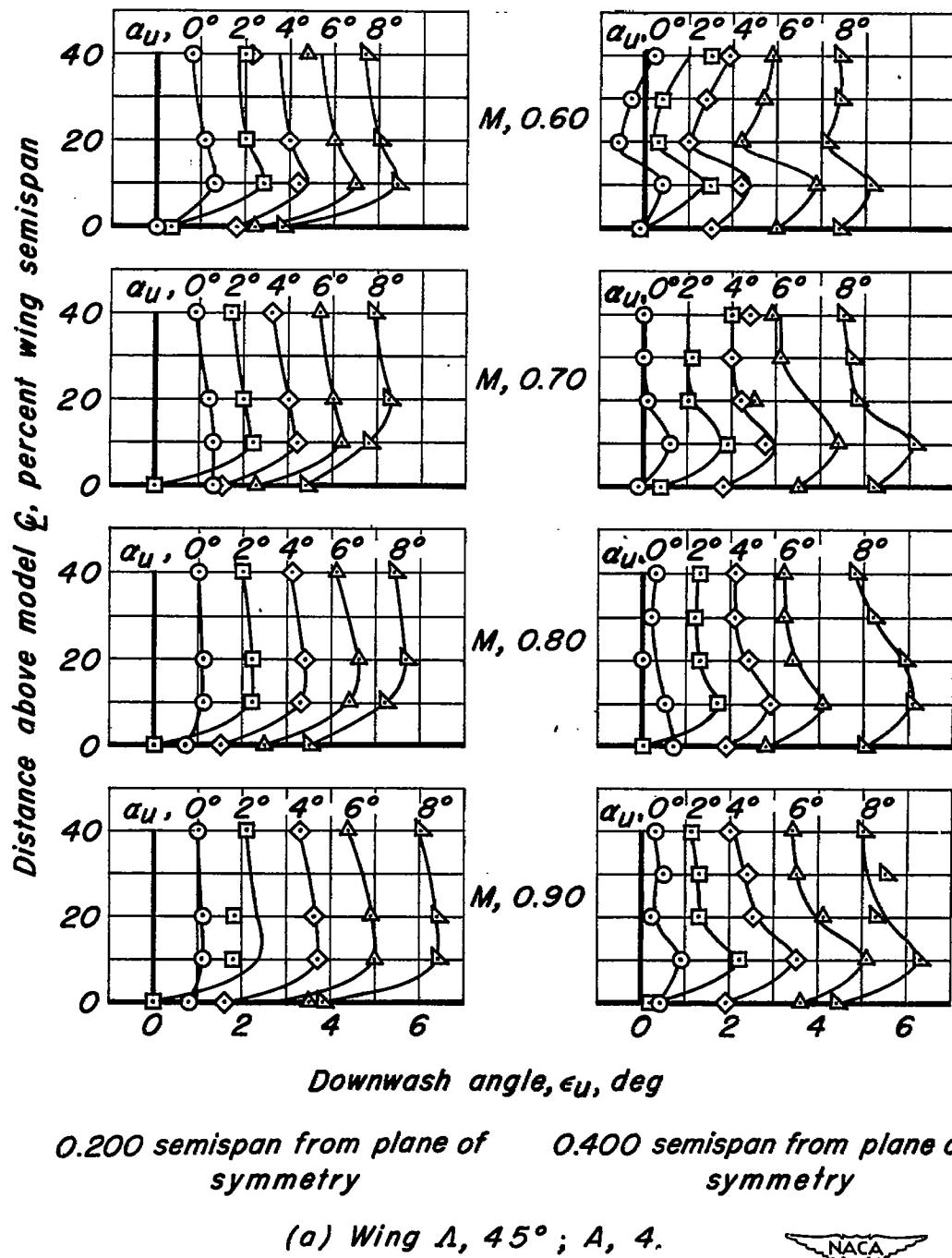
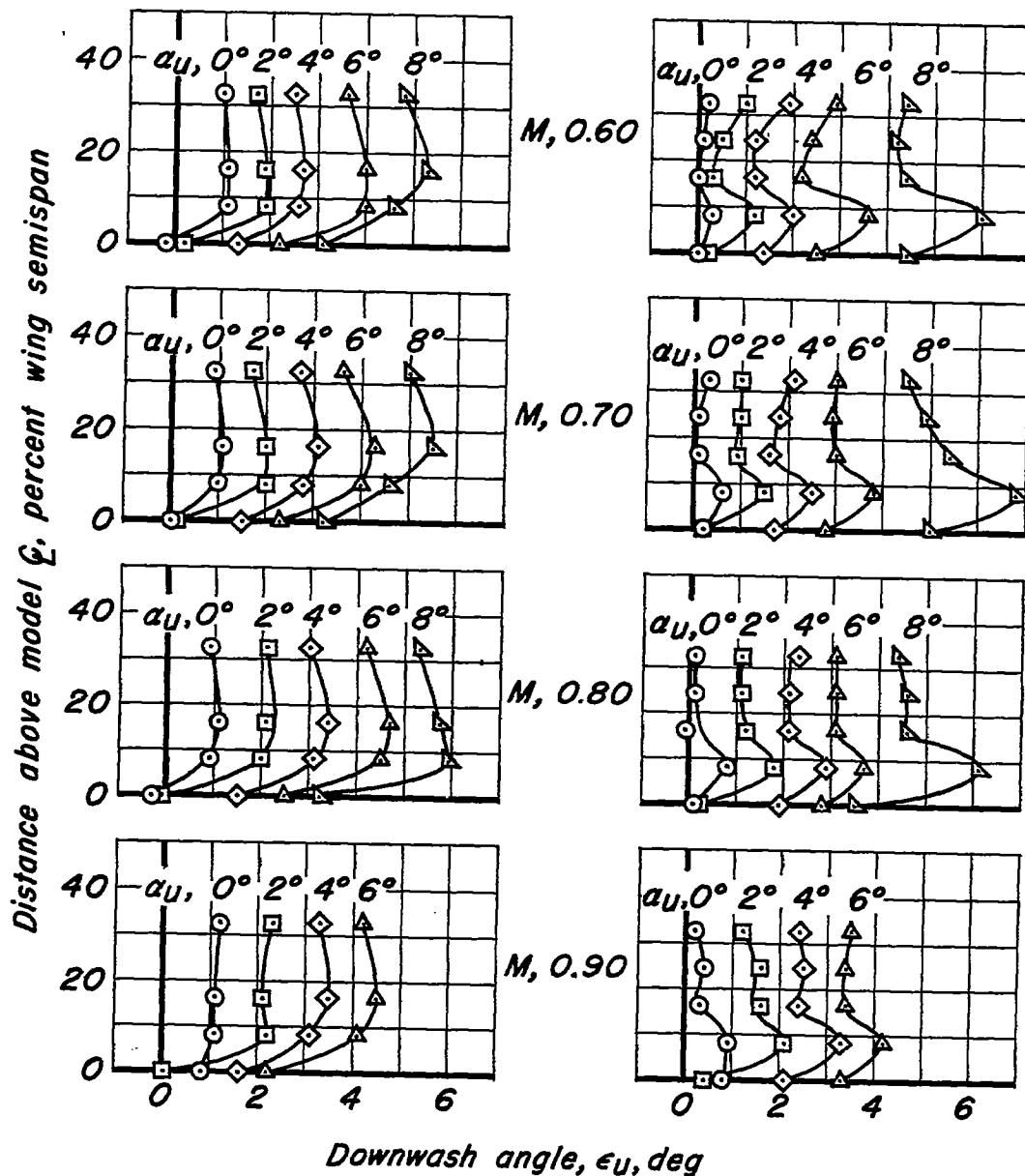


Figure 15.—Downwash angles at possible horizontal-tail locations for the three wing-fuselage combinations.

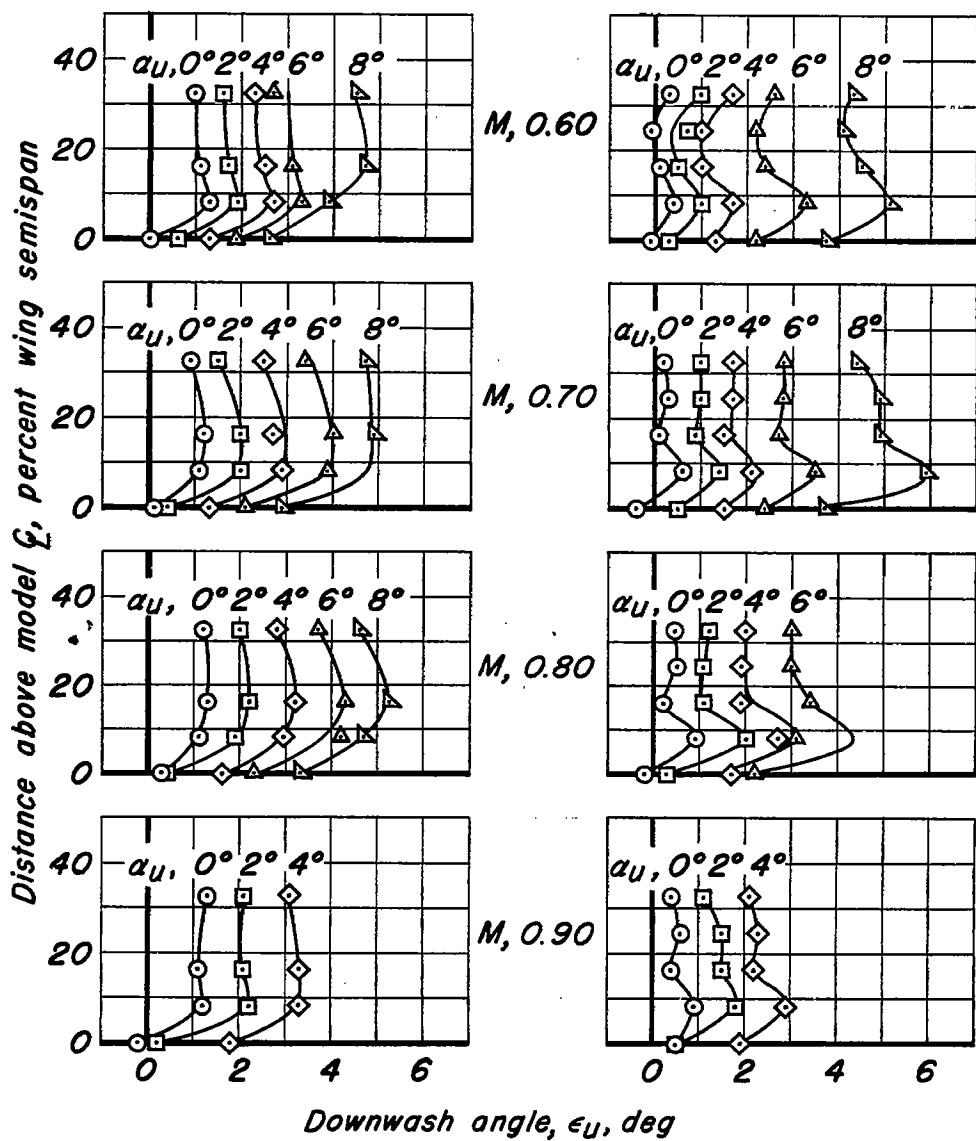


0.163 semispan from plane of symmetry 0.326 semispan from plane of symmetry

(b) Wing A, 35° ; A, 6.



Figure 15.—Continued.



0.163 semispan from plane of symmetry 0.376 semispan from plane of symmetry

(c) Wing A, 45° ; A, 6.



Figure 15.—Concluded.

	Wake measurements	
	Wing	% semispan
—	$\Lambda, 45^\circ; A, 4$	40.0
- - -	$\Lambda, 35^\circ; A, 6$	32.6
- - -	$\Lambda, 45^\circ; A, 6$	32.6

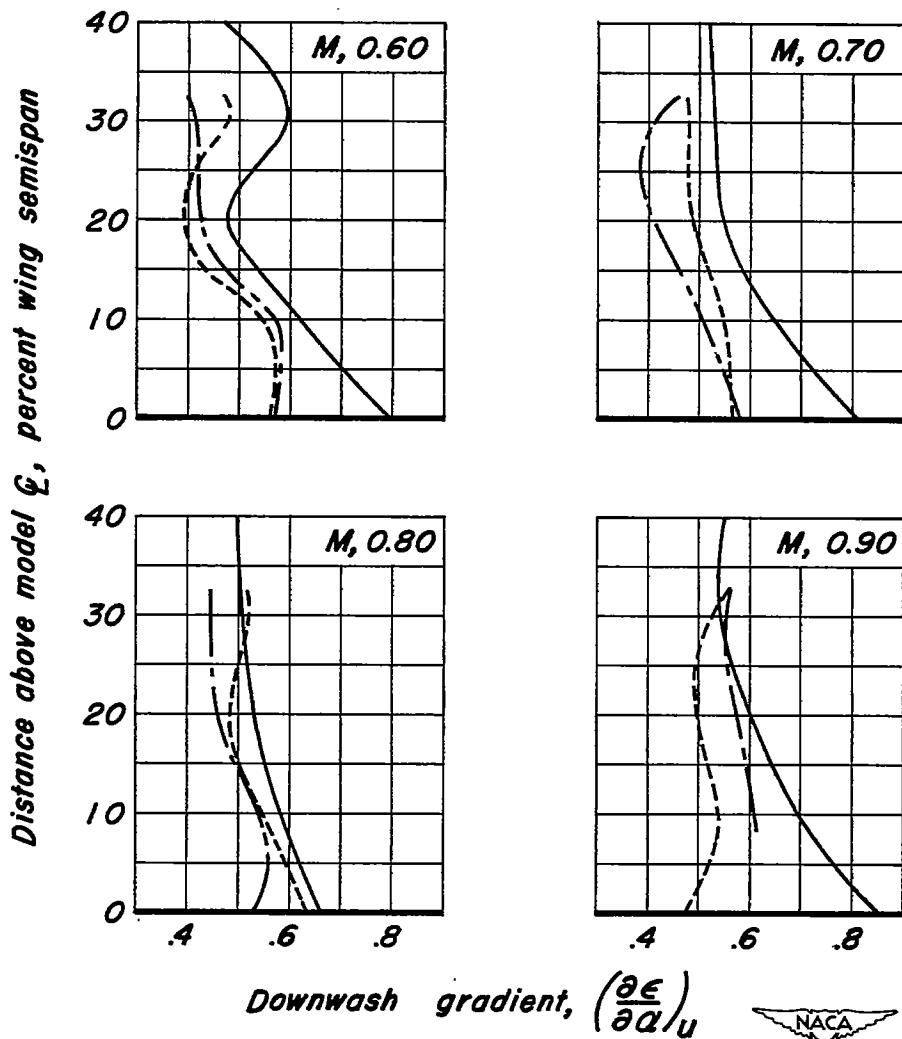


Figure 16.-Downwash gradients for the three wing-fuselage combinations, measured 12 inches from plane of symmetry.
 $C_L, 0.2.$

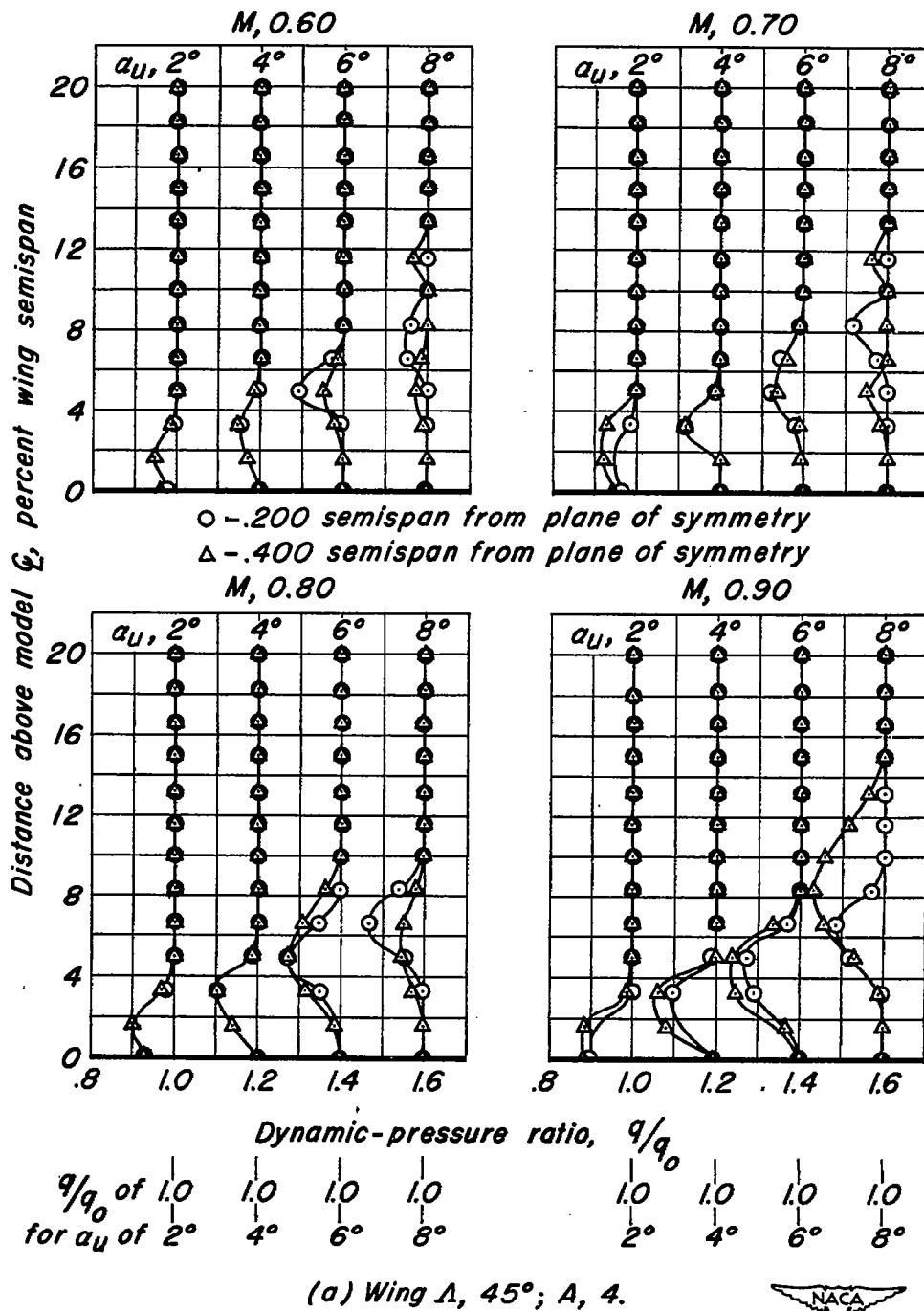


Figure 17.-Dynamic pressures at possible horizontal-tail locations for the three wing-fuselage combinations.

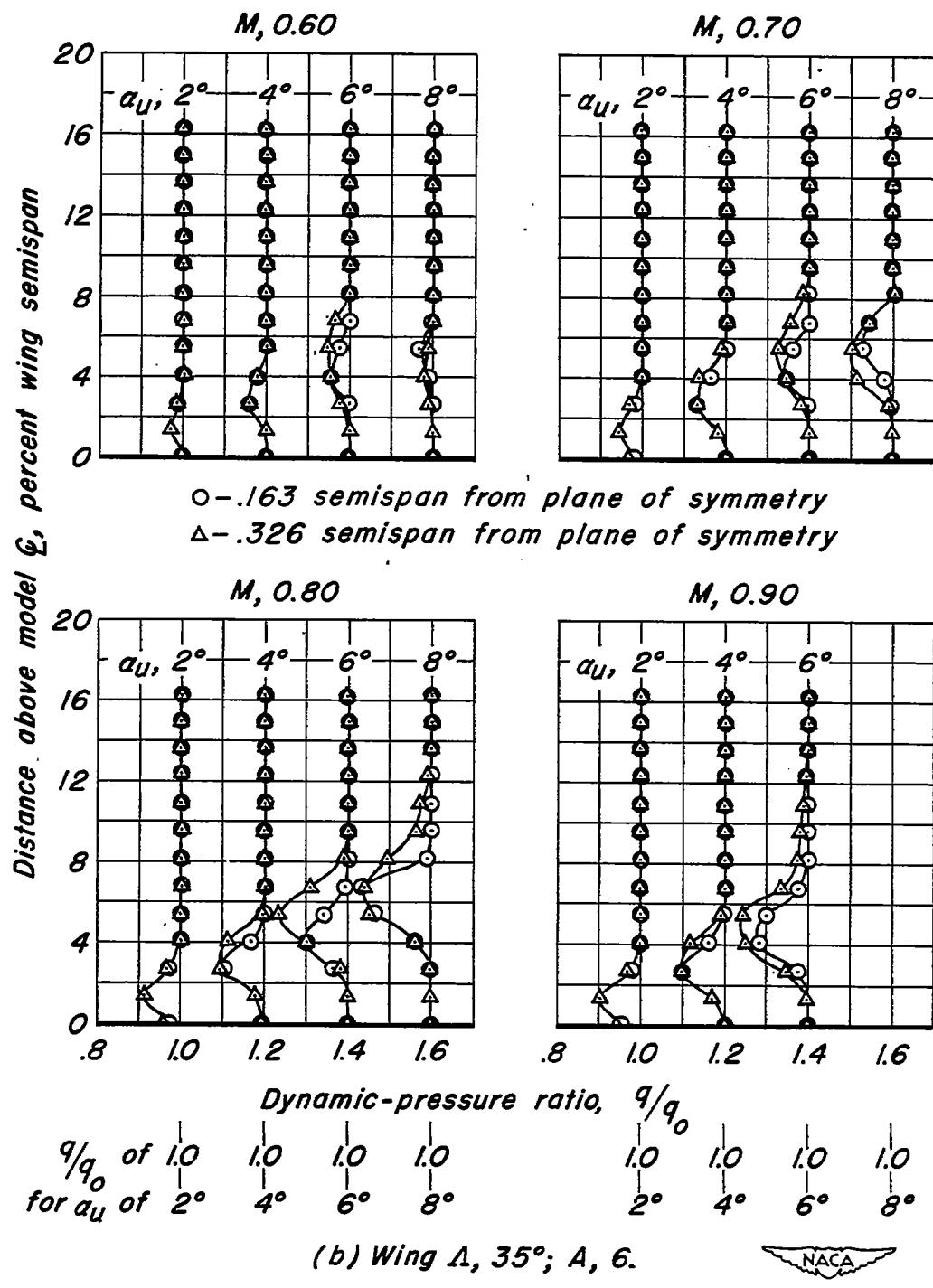
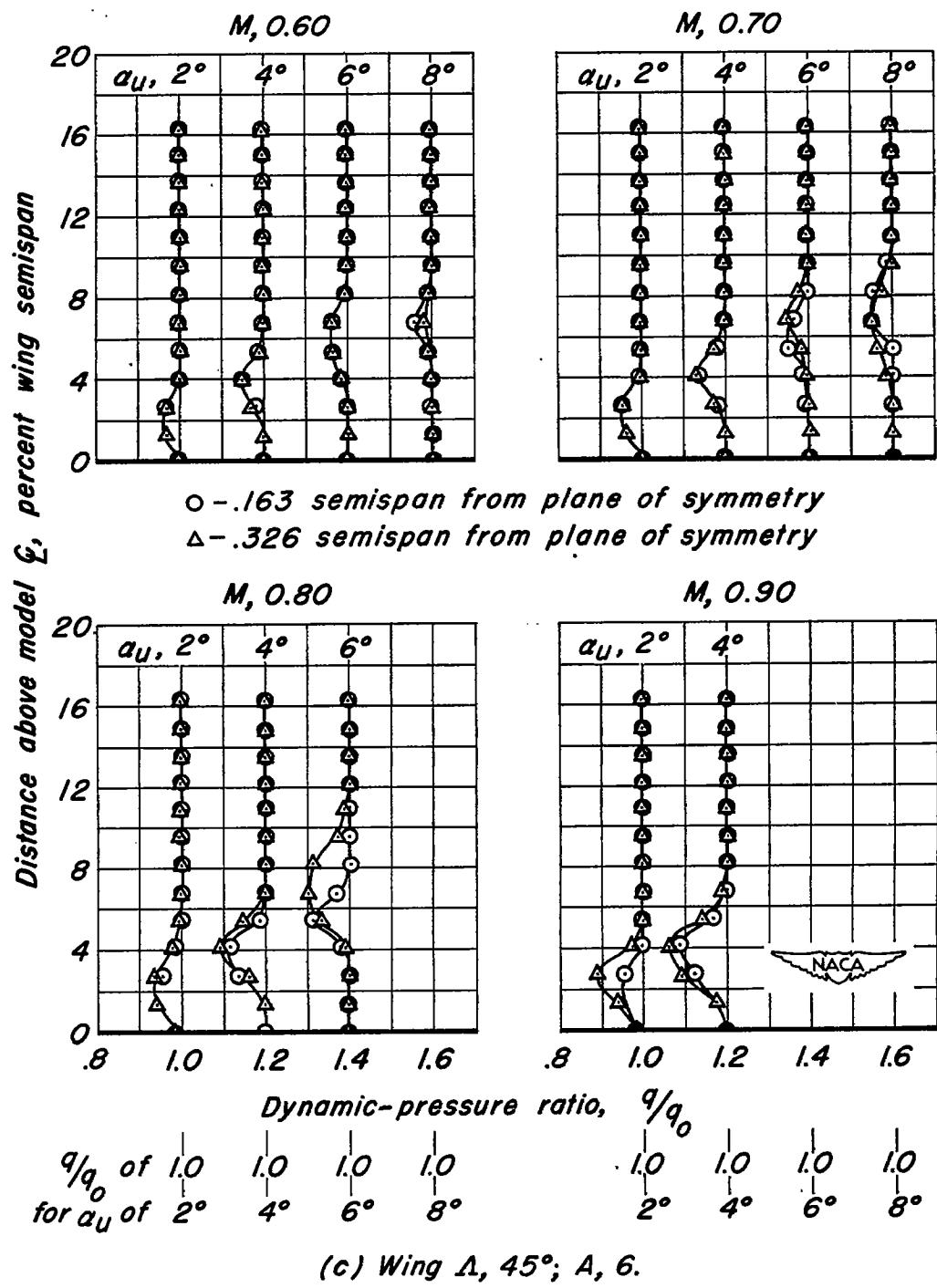


Figure 17.—Continued.



(c) Wing A, 45°; A, 6.

Figure 17.—Concluded.



$\alpha_1, 40^\circ$



$a_{u,2^0}$.



$\alpha_{11}, 40^\circ$



$\alpha_{11}, 60^\circ$.



$\alpha_u, 8^{\circ}.$



$\alpha_u, 6^{\circ}.$



α_u , 8°.

(a) M, 0.70

(b) M, 0.75.

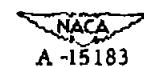
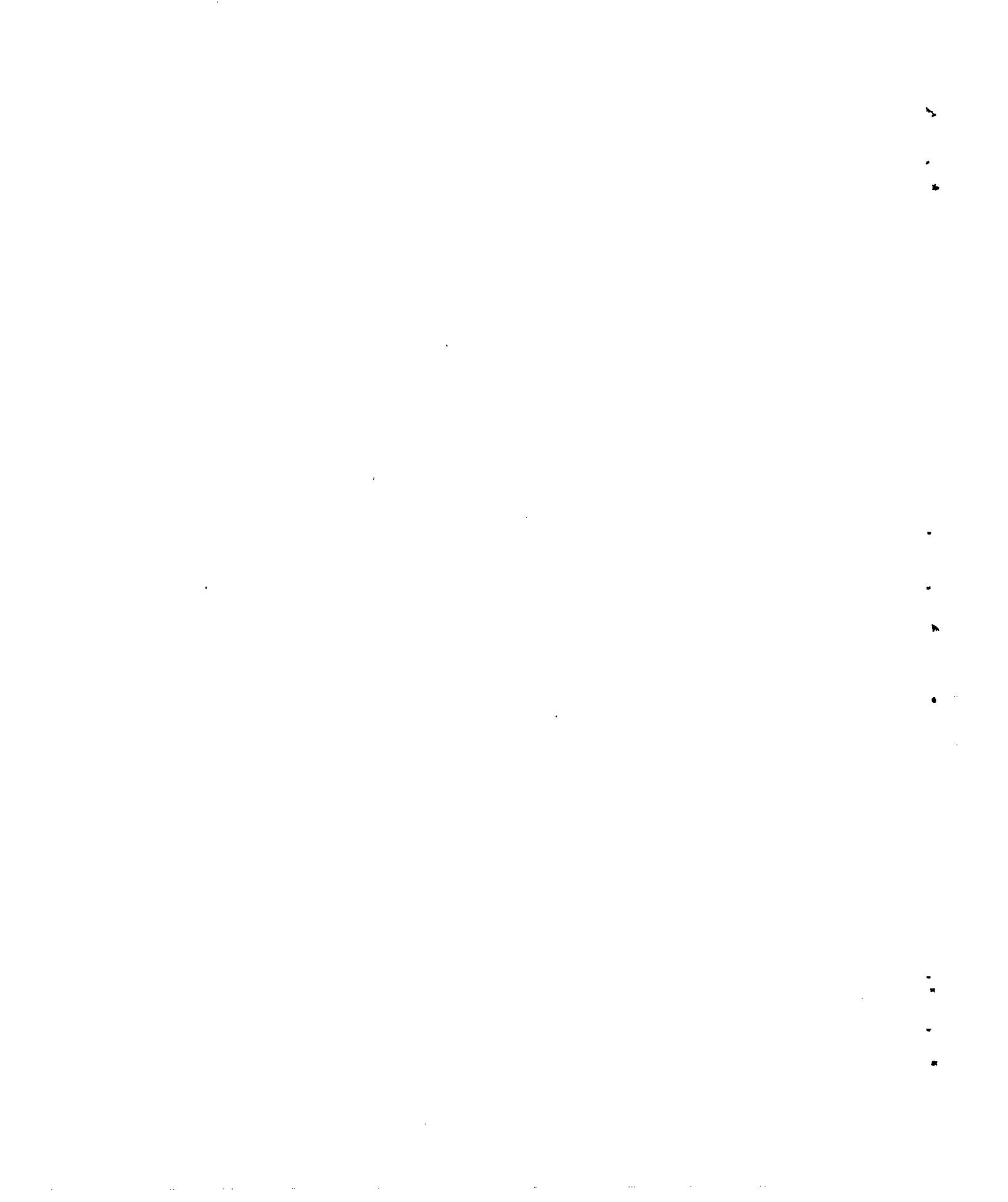


Figure 18.—Photographs of tufts on the wing-fuselage combination. Wing A, 45° ; A, 4.



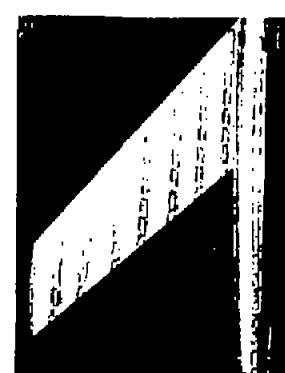
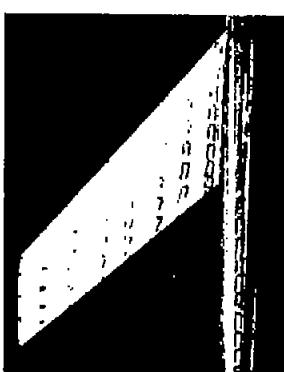
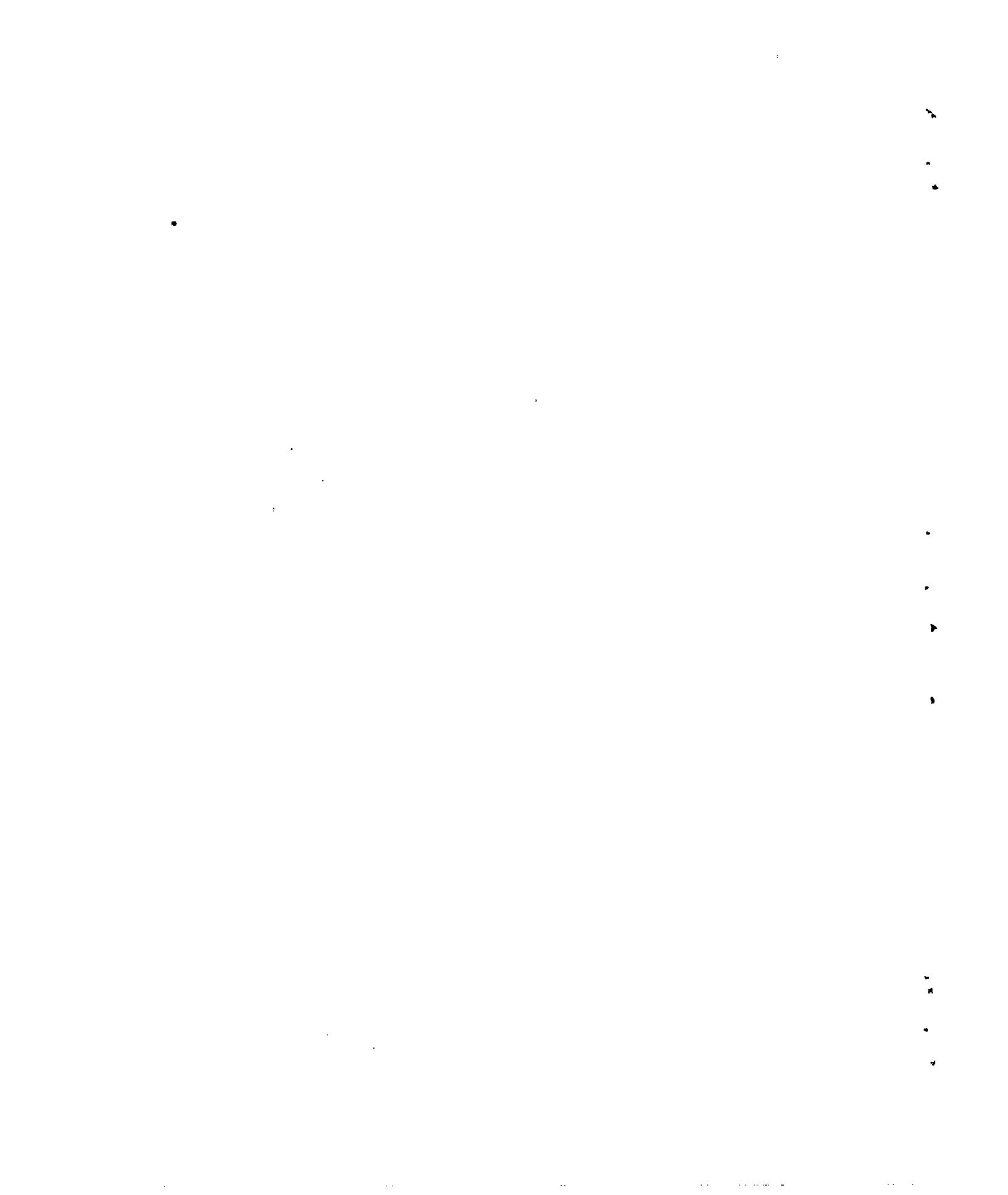
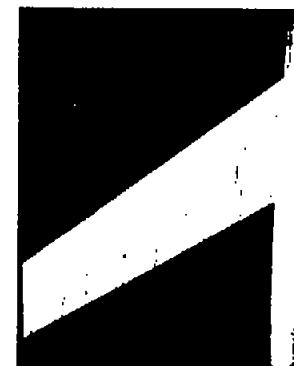
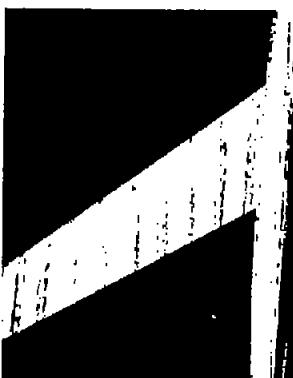
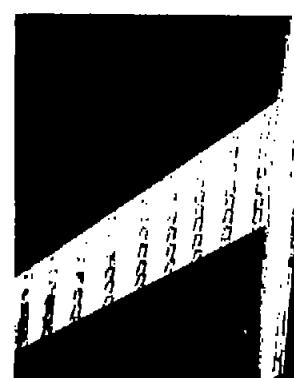
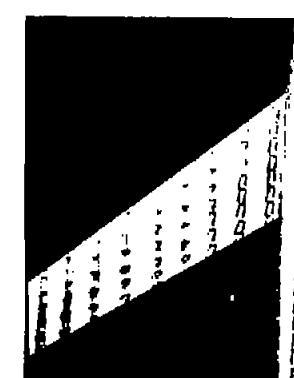
 $\alpha_u, 2^0.$  $\alpha_u, 4^0.$  $\alpha_u, 2^0.$  $\alpha_u, 4^0.$  $\alpha_u, 6^0.$  $\alpha_u, 8^0.$  $\alpha_u, 6^0.$  $\alpha_u, 8^0.$ (c) $M, 0.86.$ (d) $M, 0.90.$

Figure 18.— Concluded.

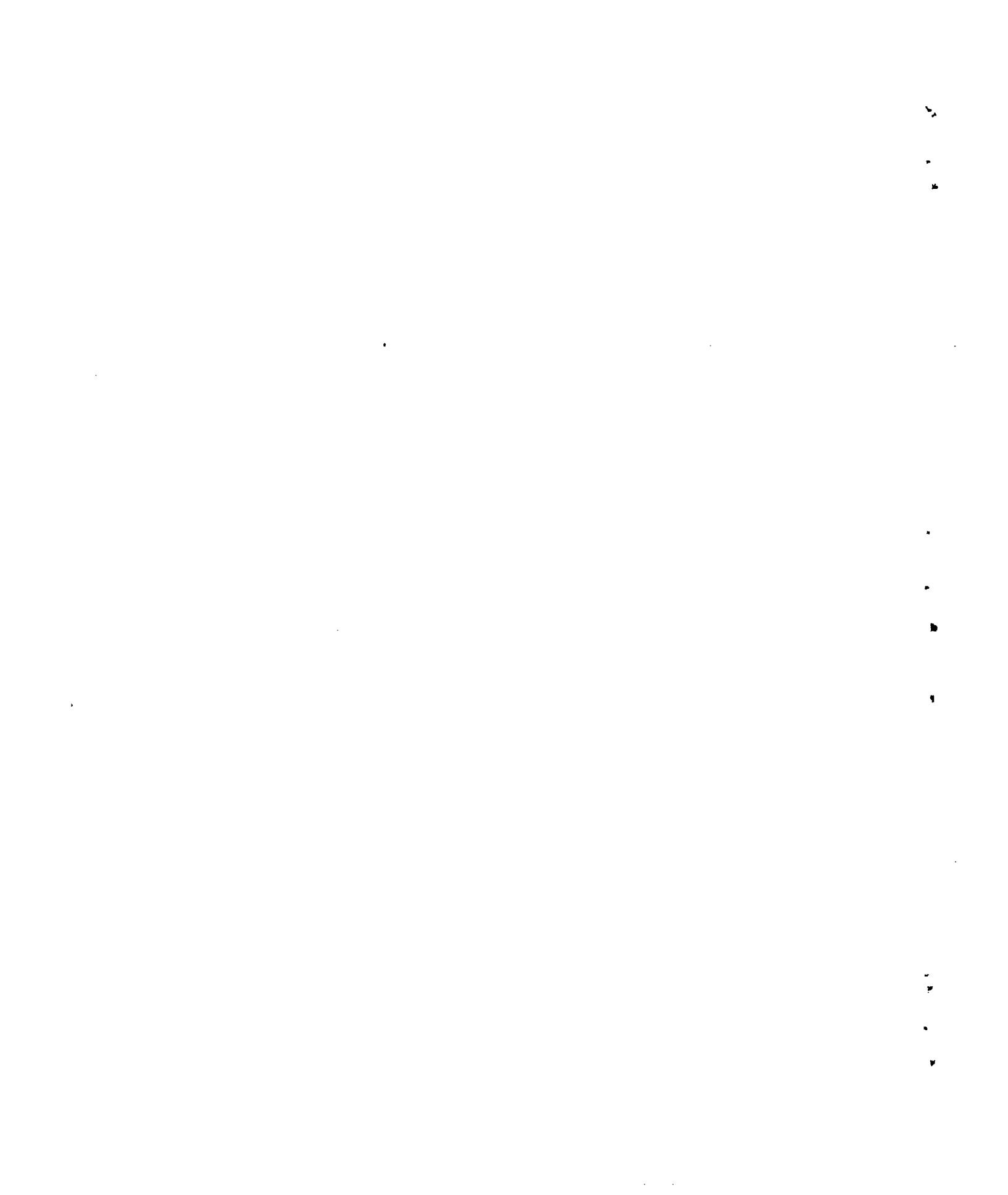


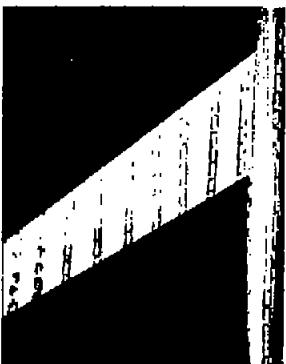
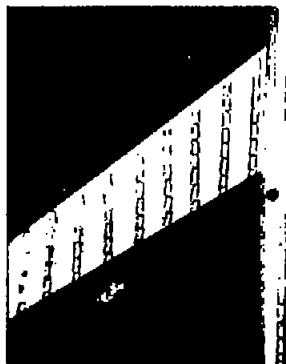
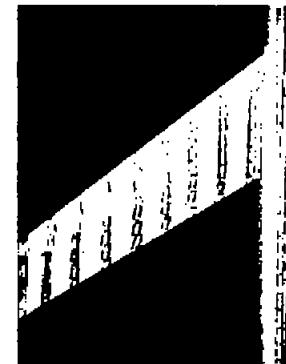
 $\alpha_u, 20^\circ.$  $\alpha_u, 40^\circ.$  $\alpha_u, 40^\circ.$  $\alpha_u, 60^\circ.$  $\alpha_u, 80^\circ.$  $\alpha_u, 60^\circ.$  $\alpha_u, 80^\circ.$

(a) M, 0.70.

(b) M, 0.75.

Figure 19.—Photographs of tufts on the wing-fuselage combination. Wing A, 35° ; A,6.



 $\alpha_u, 20^\circ.$  $\alpha_u, 40^\circ.$  $\alpha_u, 20^\circ.$  $\alpha_u, 40^\circ.$

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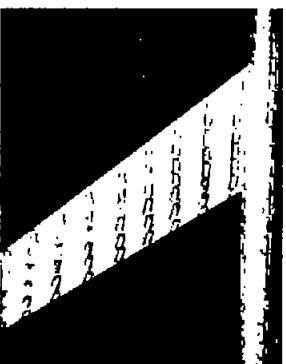
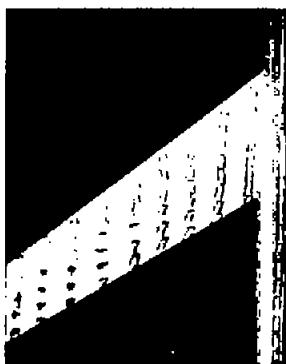
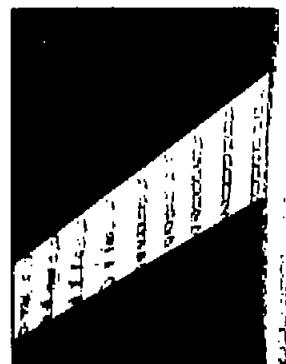
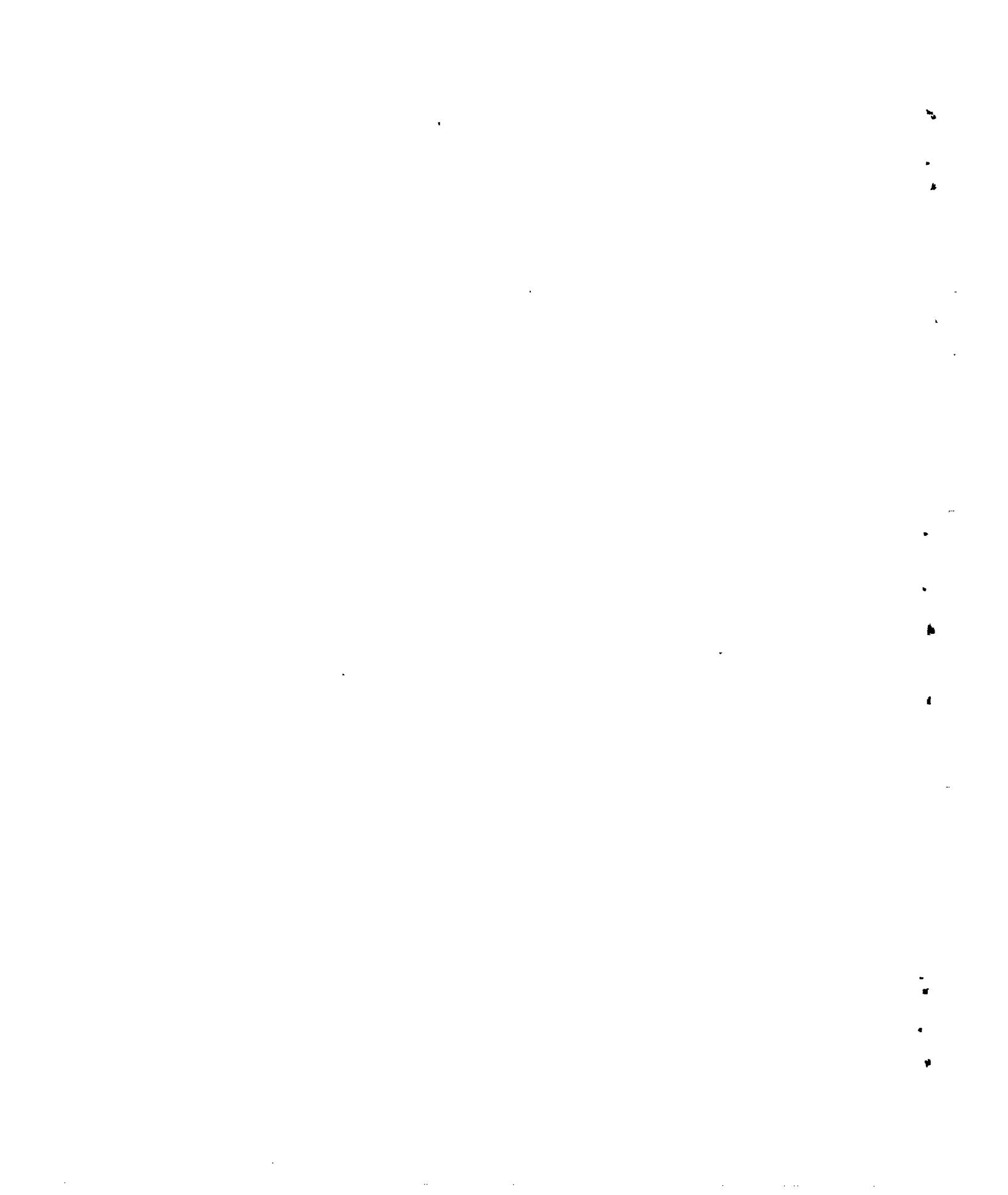
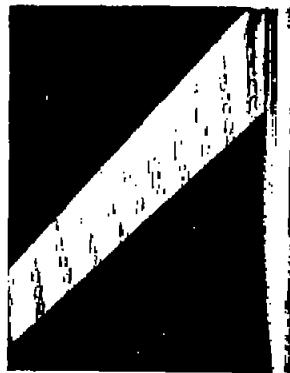
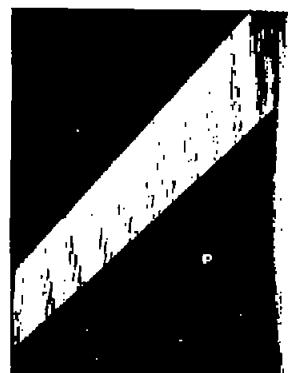
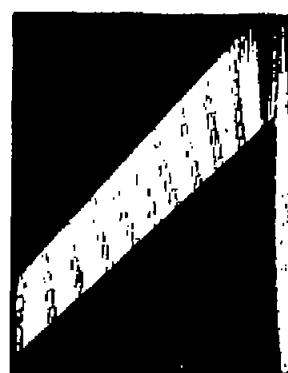
 $\alpha_u, 60^\circ.$  $\alpha_u, 70^\circ.$  $\alpha_u, 60^\circ.$ (c) $M, 0.86.$ (d) $M, 0.90.$ 

Figure 19.— Concluded.



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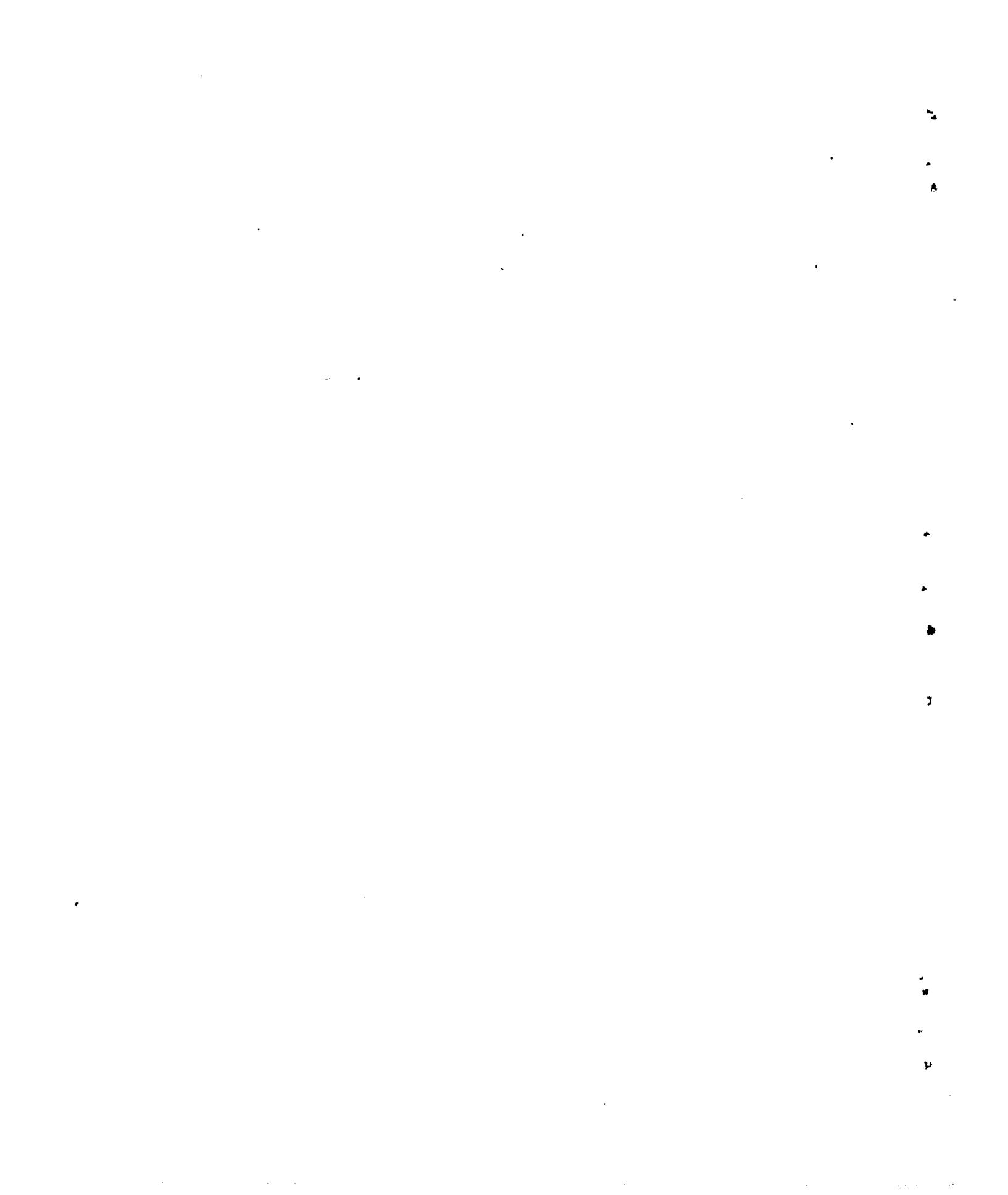
 $\alpha_L, 20^\circ.$  $\alpha_L, 40^\circ.$  $\alpha_L, 20^\circ.$  $\alpha_L, 40^\circ.$  $\alpha_L, 60^\circ.$  $\alpha_L, 80^\circ.$  $\alpha_L, 80^\circ.$

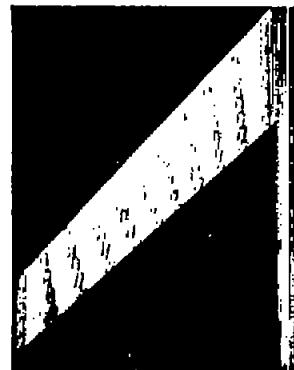
(a) M, 0.70

(b) M, 0.75.

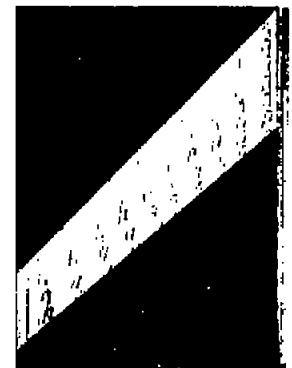
A-15187

Figure 20.—Photographs of tufts on the wing-fuselage combination. Wing A, 45° ; A,6.



 $\alpha_u, 2^{\circ}.$  $\alpha_u, 4^{\circ}.$  $\alpha_u, 2^{\circ}.$  $\alpha_u, 4^{\circ}.$  $\alpha_u, 6^{\circ}.$

(c) M, 0.86.

 $\alpha_u, 6^{\circ}.$

(d) M, 0.90.

 NACA
A-15188

Figure 20.- Concluded.